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STATE OF INDIANA

JUN 08 2007

INDIANA UTILITY REGULATORY COMMISSION

INDIANA UTILITY
REGULATORY COMMISSION

PETITION OF THE CITY OF)
ELKHART, INDIANA, FOR)
AUTHORITY TO INCREASE ITS) CAUSE NO. 43191
RATES AND CHARGES FOR WATER)
SERVICE, AND FOR APPROVAL OF)
NEW SCHEDULE OF RATES AND)
CHARGES APPLICABLE THERETO)

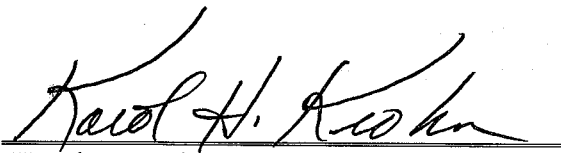
PREFILED TESTIMONY IN SUPPORT OF JOINT STIPULATION AND
SETTLEMENT AGREEMENT, FILED ON BEHALF OF THE INDIANA
OFFICE OF UTILITY CONSUMER COUNSELOR

RICHARD J. COREY - PUBLIC'S EXHIBIT NO. 1
JUDITH I. GEMMECKE - PUBLIC'S EXHIBIT NO. 2
HAROLD L. REES - PUBLIC'S EXHIBIT NO. 3
EDWARD R. KAUFMAN - PUBLIC'S EXHIBIT NO. 4

Respectfully submitted,

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR

By:


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Assistant Consumer Counselor

03/18

06/08/2007

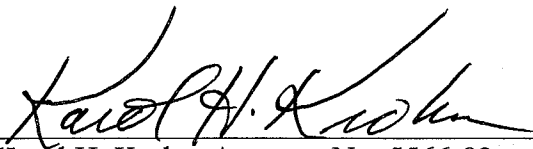
OFFICE OF THE ATTORNEY GENERAL

4077 MICHIGAN AVENUE, INDIANAPOLIS, IN 46204-2215

CERTIFICATE OF SERVICE

This is to certify that a copy of the foregoing **Prefiled Testimony in Support of Joint Stipulation and Settlement Agreement Filed on Behalf of the Indiana Office of Utility Consumer Counselor** has been served upon the following counsel of record in the captioned proceeding by electronic service and/or by depositing a copy of same in the United States mail, first class postage prepaid, on June 8, 2007.

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PUBLIC'S EXHIBIT NO. 1

Cause No. 43191

PREFILED TESTIMONY OF RICHARD J. COREY IN SUPPORT
OF JOINT STIPULATION AND SETTLEMENT AGREEMENT

FILED ON BEHALF OF THE INDIANA
OFFICE OF UTILITY CONSUMER COUNSELOR

**TESTIMONY OF RICHARD J. COREY IN SUPPORT OF
JOINT STIPULATION AND SETTLEMENT AGREEMENT**

CAUSE NO. 43191

CITY OF ELKHART WATER UTILITY

I. INTRODUCTION

1
2 **Q: Please state your name and business address.**

3 A: My name is Richard J. Corey and my business address is Indiana Government
4 Center North, Room N501, 100 North Senate Avenue, Indianapolis, Indiana 46204.

5 **Q: By whom are you employed and in what capacity?**

6 A: I am employed by the Indiana Office of Utility Consumer Counselor ("OUCC") as a
7 Utility Analyst.

8 **Q: Please describe your credentials.**

9 A: I graduated from Indiana University in May 1978 with a Bachelor of Science degree
10 majoring in accounting. Upon graduation I took a position as an accountant for
11 Tousley-Bixler Construction Company for whom I worked until 1984. At that time I
12 began attending Indiana University School of Law. After graduating from Law
13 School in 1988, I became employed by the public accounting firm of Boyd, Stamper
14 & Leeds and participated in the preparation of compilations, audits, and corporate,
15 individual and not-for-profit tax returns. From 1990 to 1993 I worked for the firm
16 of Myers & Stauffer, CPA's who specialize in Medicaid accounting, consulting and

rate setting. After a short tenure with the OUCC as a Principal Accountant in 1993, I became Controller, Corporate Secretary, and a Board Member of General Acceptance Corporation. I returned to the OUCC in 1998 as an Assistant Utility Consumer Counselor and represented the interests of the Public before the Indiana Utility Regulatory Commission in a variety of Gas, Water and Telecommunications cases. I was transferred to my current position as a Utility Analyst with the OUCC in April of 2005.

Q: Do you hold any professional licenses?

A: I have been a Certified Public Accountant since 1983, which license is currently in inactive status. I am a member of the Indiana Bar in good standing.

Q: What have you done to prepare for your presentation of testimony in this proceeding?

A: I reviewed Petitioner's testimony, accounting schedules and work papers filed in this cause. I also reviewed the Petitioner's books and records during a field visit conducted on March 22 and 23, 2007. Additionally, I participated in the preparation of discovery questions and reviewed Petitioner's responses. I have met several times with other OUCC staff members regarding the issues in this proceeding. Finally, after participating in the settlement negotiation process, I prepared this testimony to support the proposed settlement.

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¹ Additional detail concerning Petitioner's commitment to improve its valve turning maintenance is contained in the Prefiled Testimony of OUCC Witness, Harold L Rees.

1 **Q: Please discuss the relative positions of the OUCC and Petitioner before they**
2 **reached a compromised settlement in this case.**

3 A: Petitioner is a municipal utility with over 18,000 customers. In its case-in-chief,
4 Petitioner requested a 45.00% across-the-board increase in its water service rates
5 for additional annual revenues of \$2,496,902. The OUCC did not agree with all
6 of Petitioner's proposed adjustments to test year revenue and expenses. The
7 OUCC's accounting schedules indicated that a 41.66% rate increase would be
8 sufficient to fully fund Petitioner's *pro forma* revenue requirements. The overall
9 increase of 41.66% calculated by the OUCC was determined using a test year
10 ending August 31, 2006, with adjustments for fixed, known and measurable
11 changes expected to occur within 12 months of the test year.

12 **Q: How does the settlement agreement affect rates and charges?**

13 A: The settlement provides for a rate increase of 42.77% and the elimination of the
14 compact fee for water-only customers.

15 **Q: Did the OUCC accept any of Petitioner's proposed revenue or expense**
16 **adjustments?**

17 A. Yes. The OUCC accepted the following expense adjustments made by Petitioner:

- 18 1. Payroll Expense
- 19 2. Filter Maintenance
- 20 3. Insurance Expense
- 21 4. IDEM Fee

1 For a comparison of the net operating income ("NOI") adjustments proposed by
2 the Petitioner and by the OUCC, see page 2 of OUCC Accounting Schedule 1 (a
3 copy of which is attached to this testimony).

4 **IV. PRO FORMA REVENUE AT CURRENT RATES**

5 **Q. Does the OUCC agree with the Petitioner's proposed adjustment to test year**
6 **revenues for the former Suburban Utilities, Inc. customers that are now**
7 **customers of the City of Elkhart Water Utility?**

8 **A.** The OUCC agrees that there is a need for an adjustment, but does not agree with
9 the Petitioner's methodology or the amount of the proposed adjustment. The
10 OUCC's adjustment to test year revenues for former customers of Suburban
11 Utilities, Inc. ("Suburban") is addressed in the Prefiled Testimony of OUCC
12 Witness, Judith I. Gemmecke ("Public's Exhibit No. 2"). Ms. Gemmecke also
13 addressed financial statement presentation issues and Petitioner's agreed
14 elimination of the "Compact Fee" previously charged to "water-only" utility
15 customers located outside Petitioner's city limits.

16 **V. PRO FORMA ADJUSTMENTS TO O&M & DEPRECIATION EXPENSES**

17 **Q. The OUCC's adjustment for employee benefits differs from the Petitioner's by**
18 **\$999. Please explain that difference.**

19 **A:** In its filing, the Petitioner incorrectly multiplied *pro forma* full time salaries and
20 wages expense of \$1,291,880 by the 2007 Public Employee Retirement Fund

1 ("PERF") rate of 5.50%. The correct product of those two numbers is \$71,053, or a
2 difference of \$999 from the Petitioner's figure.

3 **Q. Please explain the difference between the Public's and the Petitioner's capital**
4 **item adjustments.**

5 A: In its filing, the Petitioner removed \$4,950 paid to E. H. Wachs Company for a
6 Model P/2 Rev, Air Drive & Torque Gauge from the "Supplies – Machinery and
7 Tool" expense account as an item that should have been capitalized. The OUCC
8 concurs that the item should have been capitalized. However, during its examination
9 of Petitioner's books and records, OUCC staff determined that when the Petitioner
10 paid for that item, it took advantage of a 10% discount for prompt payment. The
11 OUCC's adjustment reflects that 10% discount.

12 **Q. Why is the OUCC reducing the amount of rate case expense the utility is**
13 **requesting from \$200,000 to \$100,000 in Accounting Adjustment No. 6?**

14 A. During our field audit, the OUCC reviewed the minutes of Petitioner's Board of
15 Public Works regular meeting held on July 5, 2006. According to the minutes,
16 during that meeting Scott Miller of H.J. Umbaugh and Associates represented that a
17 city Elkharts's size would spend at least \$100,000 on a rate case, assuming that
18 "everything went well without any intervention or litigated hearings." As of this
19 writing, there has been no intervener, nor is there any reason to anticipate that this
20 rate case will result in an extensive litigation. Accordingly, the lower figure of
21 \$100,000 is more appropriate than the \$200,000 in Petitioner's filing. The OUCC
22 agrees with the five-year amortization period Petitioner used to amortize rate case
23 expense.

1 **Q. Please explain the \$11 difference between the Petitioner's and the OUCC's**
2 **adjustments for Payment in Lieu of Taxes ("PILT").**

3 A. The difference is due to Petitioner's upward rounding. In its computation of the *pro*
4 *forma* PILT expense, Petitioner multiplied the taxes due on the estimated assessed
5 value of the utility plant in service by a flat 74%. In the OUCC computation, the
6 estimated assessed value is multiplied by the computed ratio of the inside-city water
7 main length of 1,372,912 feet, divided by the system-wide water main length of
8 1,855,358, or 73.997%.

9 **Q. In what way does the OUCC's adjustment for tank painting differ from**
10 **Petitioner's proposed adjustment?**

11 A. The OUCC recommends acknowledging the Tank Maintenance Fund as a source of
12 funding for tank maintenance. In its filing, Petitioner's balance sheet shows a
13 restricted asset account named "Tank Maintenance Fund," with a balance of
14 \$1,520,981 as of March 31, 2007. In response to Question No. 37 in the OUCC's
15 Second Set of Data Requests, the Petitioner stated that the purpose of that fund is "to
16 provide for the periodic maintenance and painting of Petitioner's water tanks".

17 Since these funds are on hand and have been specifically earmarked for tank
18 painting, it is appropriate to reduce the amount of money the utility needs to recover
19 in rates for the purpose of tank painting by \$1,520,981. This reduces the *pro forma*
20 adjustment for tank painting by \$101,401, to \$90,268. The OUCC agreed with
21 Petitioner's proposed tank painting amortization periods.

1 **Q. Why does the OUCC adjustment for Utility Receipts Tax ("URT") differ from**
2 **the Petitioner's?**

3 A. The utility receipts tax is a direct function of the utility's sale of water. The OUCC's
4 *pro forma* present rate expense for URT is lower than Petitioner's primarily because
5 Petitioner used a much higher test year revenue amount than used by the OUCC.
6 (For additional background, see Prefiled Testimony of Judith I. Gemmecke on
7 Petitioner's Income Statement.)

8 **Q. Please explain the difference between the OUCC's and Petitioner's adjustments**
9 **for Extensions and Replacements ("E&R").**

10 A. In calculating its revenue requirement for E&R, Petitioner adds to the projected
11 additions over the next four years an amount that represents the average of
12 extensions and replacements historically made by the utility for the years 2003
13 through the end of the test year. In reviewing this calculation, shown on page 29 of
14 the Petitioner's filing, it can be seen that the additions to utility plant for the year
15 2003 are disproportionably high when compared to the other years in the group. An
16 examination of the actual expenditures made in 2003 show that \$402,725 was spent
17 on "12,000 Meters," and \$264,150 on "Firefly Water Meters."

18 Since Petitioner's total customer base is only 18,000 customers (approx.), Petitioner
19 purchased replacement meters for two-thirds (2/3) of its customers in a single year.
20 In settlement, the Parties agreed to exclude those two items in the computation of
21 Petitioner's average annual E&R revenue requirement, since the meters should last
22 approximately twenty-five years and will not be purchased in such large quantities

1 on an annual basis. Removing those two items from the E&R computation reduced
2 the average annual additions to utility plant by \$181,710, for an average total of
3 \$298,580.

4 The E&R line item entitled "Debt Service after Debt Service funding
5 requirements are met" is based on calculations and analysis performed by Edward
6 Kaufman, Senior Utility Analyst for the OUCC, and more fully discussed in his
7 Prefiled Testimony (Public's Exhibit No. 4).

8 **Q. Please explain the OUCC's depreciation expense adjustment in the amount of**
9 **\$139,054.**

10 A. In reviewing Elkhart's allowance for depreciation, the OUCC relied on the
11 guidelines promulgated by the IURC in its memo dated December 28, 1987. These
12 guidelines permit a municipal utility that produces its own water to use a composite
13 depreciation rate of 2%. The OUCC's adjustment was computed by adding the
14 capitalized items referred to above to the utility plant in service at the end of the test
15 year. The land was deducted to provide a net figure for depreciable assets. The 2%
16 composite depreciation rate was applied to the total depreciable asset figure, yielding
17 a *pro forma* annual depreciation expense of \$856,819. Deducting the test year
18 depreciation expense of \$717,765 resulted in a \$139,054 adjustment to Petitioner's
19 test year depreciation expense. The Petitioner did not propose any adjustment to its
20 test year depreciation figure and seeks approval of its E&R figure (discussed above),
21 instead of its *pro forma* depreciation expense.

1 **VI. RECOMMENDED APPROVAL OF PROPOSED SETTLEMENT**

2 **Q. What are your recommendations regarding this cause?**

3 A. I recommend the Commission's order in this cause approve the agreed accounting
4 adjustments described above and the rates indicated in OUCC Accounting
5 Schedules 1 through 8, as the Parties have agreed in settlement. Based on the
6 resulting agreed *pro forma* revenue requirement and agreed *pro forma* revenue at
7 current rates, I recommend the Commission approve a 42.77% across-the-board
8 increase to Elkhart's current water utility service rates. That increase is supported
9 by the accounting evidence in this case, complies with applicable law, and
10 therefore serves the public interest.

11 **Q: Does this conclude your testimony?**

12 A: Yes

Elkhart Municipal Water Utility
CAUSE NUMBER 43191

Revenue Requirements

	Per Petitioner as filed	Per OUCC Settlement	Sch Ref	OUCC More (Less)
Operating Expenses	\$ 4,285,674	\$ 3,978,116	4	\$ (307,558)
Extension and Replacements	3,632,090	2,580,915	7	(1,051,175)
Debt Service	883,588	821,000	ERK	(62,588)
Total Revenue Requirements	8,801,352	7,380,031		(1,421,321)
Less: Interest Income	56,000	56,000	3	-
Net Revenue Requirements	8,745,352	7,324,031		(1,421,321)
Less: Revenues at current rates subject to increase	5,548,672	5,108,960	4	(439,712)
Other revenues at current rates	504,062	58,916	4	(445,146)
Net Revenue Increase Required	2,692,618	2,156,155		(1,866,466)
Plus Utility Receipts tax on increase (other than on increase to non-taxable receipts)	41,538	29,126		(12,412)
Calculated Increase	<u>2,734,156</u>	<u>2,185,281</u>		<u>(548,875)</u>
Total New URT				
Calculated Percentage Increase	<u>49.28%</u>	<u>42.77%</u>		<u>-6.51%</u>
Requested Percentage Increase	45.00%			

	Per Petitioner as filed	Per OUCC Settlement	OUCC More (Less)
<u>Current Rate for 700 cubic feet</u>			
<u>Elkhart Customers</u>			
Current Rate \$1.04 per first 40 CCF water +1.60 for 5/8" meter			
Currently the cost of 700 cubic feet = \$8.88	\$ 12.88	\$ 12.68	\$ (0.20)
<u>Former Suburban Customers</u>			
Current cost of 700 cubic feet = \$17.72 (minimum)	\$ 12.88	\$ 12.68	\$ (0.20)

Elkhart Municipal Water Utility
CAUSE NUMBER 43191

Reconciliation of Net Operating Income Statement Adjustments
Pro-forma Present Rates

	Per Petitioner as filed	Per OUCC	OUCC More (Less)
Operating Revenues			
Residential Revenues	(46,818)	(37,127)	9,691
Commercial Revenues	0	0	0
Multi-family Revenues	0	0	0
Public Revenues	0	0	0
Public Fire Protection	0	2,508	2,508
Private Fire Protection	0	4,066	4,066
Total Revenues	(46,818)	(30,554)	16,264
O&M Expense			
Salaries and Wages	63,820	63,820	-
Employee Benefits	62,261	61,262	(999)
Maintenance Expense	9,825	9,825	-
Capital Item	(4,950)	(4,455)	495
Tank Painting	191,669	90,268	(101,401)
Valve Turning Program		57,000	57,000
Rate Case Expense	40,000	20,000	(20,000)
PILT	(253,960)	(253,971)	(11)
Insurance Expense	170,000	170,000	-
IDEM Fee	1,370	1,370	(0)
Utility Receipt Tax	15,121	11,050	(4,071)
Depreciation Expense		139,054	139,054
Total Operating Expenses	295,156	365,222	70,066
Net Operating Income	(\$341,974)	(\$395,776)	(\$53,802)

Elkhart Municipal Water Utility
CAUSE NUMBER 43191

COMPARATIVE BALANCE SHEET

<u>ASSETS</u>	As of	
	<u>8/31/2006</u>	<u>12/31/2005</u>
Utility Plant:		
Utility Plant in Service	\$ 43,433,845	\$ 43,215,659
Construction Work in Progress	2,853,280	2,853,280
Less: Accumulated Depreciation	<u>(11,421,364)</u>	<u>(11,054,697)</u>
Net Utility Plant in Service	<u>34,865,761</u>	<u>35,014,242</u>
Restricted Assets:		
Depreciation fund	1,510,703	1,321,408
Tank maintenance fund	1,431,801	1,329,881
Customer deposits fund	159,953	156,863
Bond and interest account	1,034,779	888,379
Debt service fund	472,501	472,501
Water main extension fund	3,894	
Total Non-current Assets	<u>4,613,631</u>	<u>4,169,032</u>
Current Assets:		
Cash and Cash Equivalents	1,039,587	869,335
Interest receivable	6,198	6,198
Accounts Receivable	539,124	569,175
Allowance for doubtful accounts	(150,208)	(150,208)
Other accounts receivable (net)	64,863	64,863
Materials and Supplies	161,195	161,195
Prepays	100,406	406
Other Current Assets		
Total Current Assets	<u>1,761,165</u>	<u>1,520,964</u>
Deferred Debits		
Unamortized bond issuance costs	25,811	31,884
unamortized bond discount	<u>17,850</u>	<u>22,050</u>
Total Deferred Debits	<u>43,661</u>	<u>53,934</u>
Total Assets	<u>\$ 41,284,218</u>	<u>\$ 40,758,172</u>

Elkhart Municipal Water Utility
CAUSE NUMBER 43191

COMPARATIVE BALANCE SHEET

<u>LIABILITIES</u>	As of	
	<u>8/31/2006</u>	<u>12/31/2005</u>
Net Assets		
Invested in capital assets, net of related debt	29,612,481	29,360,962
Restricted for debt service	1,507,280	1,360,880
Restricted for capital outlay	3,894	
Unrestricted net assets	7,361,084	6,925,940
Total Net Assets	<u>38,484,739</u>	<u>37,647,782</u>
Long-term Debt		
Bonds Payable	1,585,000	1,995,000
Compensated absences payable		68,356
Total Long-term Debt	<u>1,585,000</u>	<u>2,063,356</u>
Current Liabilities		
Accounts Payable	83,841	61,130
Wages and benefits payable	54,705	48,123
Sales tax payable	85,668	(70,271)
Due to other funds	26,540	26,310
Compensated absences (current)	-	13,263
Deposits payable	65,137	65,137
Hydrant deposits payable	6,500	
Other taxes payable	70,271	91,525
Current portion of long term debt	815,000	805,000
Matured interest payable	6,817	6,817
Total Current Liabilities	<u>1,214,479</u>	<u>1,047,034</u>
Total Liabilities	<u>\$ 41,284,218</u>	<u>\$ 40,758,172</u>

Elkhart Municipal Water Utility
CAUSE NUMBER 43191

COMPARATIVE INCOME STATEMENT

	For the Twelve Months Ended 8/31/06	12/31/2005 (Petitioner's Filing)
	OUC 8/31/2006	Petitioner's Filing
Operating Revenues		
Metered Revenues		\$ 5,181,483
Residential Revenues	\$2,092,792	\$ 5,215,995
Commercial Revenues	995,477	
Industrial Revenues	505,991	
Multi-family Revenues	585,242	
Public Revenues	173,382	
Sub-total	4,352,885	
Public Fire Service (Hydrant Charge)	473,443	
Private Fire Service	257,776	414,001
Late Charges (code 55)	55,410	
NSF Fees (code 18)	4,329	
Past Due Collection Charge (code 22)	11,760	
New Account Charges (code 61)	23,655	
Meter Set and Meter Yoke Chgs (codes 62-65,81)	3,862	
Turn on Charges	1,365	
Overtime Service Call	1,018	
Damaged Meter Replacement	1,652	
Adjustments	6,501	504,062
Analytical Services - Bacteriological Samples ¹	4,775	677,331
* Sales Tax (\$250,400)		
* Compact Fee (\$277,750)		
Total Operating Revenues	5,198,430	6,099,546
¹ Petitioner response to OUC DR Question #48		6,286,216
Operating Expenses		
Salaries and wages	1,247,977	1,247,977
Employee benefits	295,772	295,772
Purchased Power	266,874	266,874
Natural Gas	52,789	52,789
Materials and supplies	439,500	439,500
Utilities	278	278
Chemicals	68,526	68,526
PILT	550,005	550,005
Insurance	130,000	130,000
Contractual services	454,700	454,700
Transportation	1,004	1,004
Testing	32,135	32,135
Rent	1,880	1,880
Miscellaneous	151,221	151,221
* Sales Tax (\$238,572)		238,572
Utility Receipts Tax	59,287	59,287
Total O&M Expense	3,751,948	3,990,520
Depreciation Expense	717,765	717,765
Total Operating Expenses	4,469,713	4,708,285
Net Operating Income	728,717	1,391,261
Other Income (Expense)		
Interest Income	56,000	56,000
Interest Expense	(89,925)	(89,925)
Amortization Expense	(16,488)	(16,488)
Total Other Income (Expense)	(50,413)	(50,413)
Net Income	\$ 678,304	\$ 1,340,848

Elkhart Municipal Water Utility
CAUSE NUMBER 43191

Pro-forma Net Operating Income Statement

	Year Ended 8/31/2006	Adjustments	Sch Ref	<i>Pro-forma</i> Present Rates	Adjustments	Sch Ref	<i>Pro-Forma</i> Proposed Rates
Operating Revenues							
Residential Revenues	\$2,092,792	\$ (37,127)	5-1	\$2,055,664	\$ 879,208	1	\$2,934,872
Commercial Revenues	995,477			995,477	425,766	1	1,421,243
Industrial Revenues	505,991			505,991	216,413	1	722,404
Multi-family Revenues	585,242			585,242	250,308	1	835,550
Public Revenues	173,382			173,382	74,156	1	247,538
Public Fire Protection	473,443	2,508	5-2	475,951	203,564	1	679,515
Private Fire Protection	257,776	4,066	5-3	261,841	111,990	1	373,831
Late Charges	55,410			55,410	23,699	1	79,109
Other / Miscellaneous	58,916			58,916			58,916
Total Operating Revenues	<u>5,198,430</u>	<u>(30,554)</u>		<u>5,167,876</u>	<u>2,185,104</u>		<u>7,352,980</u>
O&M Expense	3,751,948			3,978,116			4,007,242
Salaries and Wages		63,820	6-1				
Employee Benefits		61,262	6-2				
Maintenance Expense		9,825	6-3				
Non-recurring Item		(4,455)	6-4				
Tank Painting		90,268	6-5				
Valve Turning Program		57,000	6-12				
Rate Case Expense		20,000	6-6				
PILT		(253,971)	6-7				
Insurance Expense		170,000	6-8				
IDEM Fee		1,370	6-9				
Utility Receipt Tax		11,050	6-10		29,126	6-10	
Depreciation Expense	717,765	139,054	6-11	856,819			856,819
Total Operating Expenses	<u>4,469,713</u>	<u>365,222</u>		<u>4,834,935</u>	<u>29,126</u>		<u>4,864,061</u>
Net Operating Income	<u>\$ 728,717</u>	<u>\$ (395,776)</u>		<u>\$ 332,941</u>	<u>\$2,155,978</u>		<u>\$2,488,919</u>

Elkhart Municipal Water Utility
CAUSE NUMBER 43191

Revenue Adjustments

(1)

Suburban Utilities Conversion

To adjust revenue to reflect the conversion of former customers of Suburban Utilities Inc. to City of Elkhart water rates.

Pro forma suburban customer water revenues at present Elkhart rates (1)	\$46,354.19
Pro forma suburban customer fire protection revenues	
5/8 inch meter customers (2)	9,419.76
3/4 inch meter customers (2)	51.60
1 inch meter customers (2)	528.82
2 inch meter customers (2)	68.16
Less test year suburban customer revenues (3)	(93,549.89)
Adjustment	<u><u>(\$37,127)</u></u>

Elkhart Municipal Water Utility
CAUSE NUMBER 43191

(2)

Hydrant Charges

Source Code 43 under Miscellaneous Income "Receivables Report"

12-month Rolling Total

Sep-05	\$39,283.61	
Oct-05	39,338.28	
Nov-05	39,313.27	
Dec-05	39,427.38	
Jan-06	39,452.65	
Feb-06	39,371.49	
Mar-06	39,301.10	
Apr-06	39,452.17	
May-06	39,523.85	
Jun-06	39,455.64	
Jul-06	39,760.19	
Aug-06	39,763.50	\$473,443.13 test year
Sep-06	39,872.90	474,032.42
Oct-06	39,811.57	474,505.71
Nov-06	39,738.63	474,931.07
Dec-06	39,716.22	475,219.91
Jan-07	39,817.96	475,585.22
Feb-07	39,737.23	<u>475,950.96</u>

Adjustment based on most recent 12 month total

\$2,507.83

Elkhart Municipal Water Utility
CAUSE NUMBER 43191

(3)

Private Fire Protection

Class 8; Source Code 11 & 13

Private Fire	Number	\$ Amount	12-month Rolling Total
Sep-05	564	21,430.65	
Oct-05	557	21,525.51	
Nov-05	560	21,361.15	
Dec-05	557	21,500.44	
Jan-06	562	21,163.03	
Feb-06	559	21,409.49	
Mar-06	561	21,361.26	
Apr-06	564	21,428.71	
May-06	566	21,503.37	
Jun-06	568	21,624.24	
Jul-06	570	21,696.46	
Aug-06	574	21,771.23	
Test Year	6762		\$257,775.54
Sep-06	580	21,886.04	258,230.93
Oct-06	581	21,939.42	258,644.84
Nov-06	588	\$22,205.92	259,489.61
Dec-06	585	22,097.07	260,086.24
Jan-07	586	22,050.36	260,973.57
Feb-07	583	22,277.19	261,841.27

Adjustment based on most recent 12 month total \$4,065.73

Elkhart Municipal Water Utility
CAUSE NUMBER 43191

Expense Adjustments

(1)

Payroll Expense

To adjust test year payroll expenses for current wage scales.

Pro forma salaries and wages	\$1,310,040	
Less Test year expense	<u>(1,246,220)</u>	
Adjustment - Increase		<u>\$63,820</u>

(2)

Employee Benefits

To adjust test year employee benefits expense for *pro forma* salaries and wages and *pro forma* employee benefits expense.

Pro forma salaries and wages expense	\$1,310,040	
Times 7.65%	<u>7.65%</u>	
Pro forma FICA expense	100,218	
Less test year expense	<u>(89,891)</u>	
Sub-total - Adjustment for FICA		\$10,327
Pro forma salaries and wages expense	1,310,040	
Less pro forma part time wages	<u>(18,160)</u>	
Sub-total	1,291,880	
Times 2007 PERF rate	<u>5.50%</u>	
Pro forma PERF expense	71,053	
Less test year expense	<u>(58,999)</u>	
Sub-total - Adjustment for PERF		12,054
Pro forma health and life insurance expense	171,013	
Less test year expense	<u>(137,212)</u>	
Sub-total - Adjustment for Health & Life Insurance		33,801
Pro forma wellness expense	14,750	
Less test year expense	<u>(\$9,670)</u>	
Sub-total - Adjustment for wellness expense		<u>5,080</u>
Adjustment - Increase to test year expense		<u>\$61,262</u>

(3)

Filter Maintenance

To provide an allowance for periodic filter maintenance expense, per OUCG engineering staff.

Pro forma annual filter maintenance expense - 8 x 40 horizontal filters	\$114,000	
Amortized over 20 years	20	
Sub-total		\$5,700
Pro forma annual filter maintenance expense - 10 x 50 pressure filters	\$82,500	
Amortized over 20 years	20	
Sub-total		4,125
Adjustment		<u>\$9,825</u>

(4)

Capital Items

To adjust the test year for capital items that were expensed during the test year.

<u>Date</u>	<u>Description</u>	<u>Amount</u>
October, 2005	Model P/2 Rev, Air Drive & Torque Gauge	(\$4,950)
Less: 10% discount taken		495
Adjustment		<u>(\$4,455)</u>

(5)

Tank Maintenance Expense

To provide an allowance for periodic tank painting expense, per OUCG engineering staff.

	<u>Exterior Painting Expense</u>	<u>Floor & Sides Painting Expense</u>	<u>Total</u>
<u>15 Year Amortization</u>			
Three Ground Storage Tanks	\$300,000	\$450,000	\$750,000
Elevated storage tanks			
Riverview tank - 1 MG	180,000	160,000	340,000
Benham tank - .5 MG	150,000	100,000	250,000
SWF Tank - .5 MG	100,000	80,000	180,000
Bower tank - .5 MG	100,000	80,000	180,000
Proposed tank - 1 MG	180,000	160,000	340,000
Proposed tank - .75 MG	165,000	130,000	295,000
Sub total	1,175,000	1,160,000	2,335,000
Less: Tank Maintenance Fund Balance (March 31, 2007 balance)			(1,520,981)
Sub total			814,019
Amortized over 15 years			<u>54,268</u>
<u>10 Year Amortization</u>			
Three Ground Storage Tanks - Pro forma interior roof painting expense			360,000
Amortized over 10 years			10
			<u>36,000</u>
Adjustment			<u>\$90,268</u>

(6)
Rate Case Expense

To provide an allowance for a utility rate case every five years.

Pro forma utility rate case expense	\$100,000
Amortized over 5 years	<u>5</u>
Adjustment	<u>\$20,000</u>

(7)
Payment in Lieu of Property Taxes

To provide an allowance for payment in lieu of property taxes ("PILT") to the Civil City.

Utility plant in service and construction work in progress (unaudited)	\$46,287,125
Accumulated depreciation	<u>(11,421,364)</u>
Estimated Assessed Value	<u>34,865,761</u>
Payment in lieu of property taxes based on corporate tax rate of \$1.2699 per \$100 of assessed value for 2005 payable 2006 taxes (net of property tax replacement credit of \$.096438)	\$400,061
Inside city water main length (ft.)	1,372,912
System wide water main length (ft.)	<u>1,855,358</u>
Estimated utility plant inside city	<u>74%</u>
Pro forma PILT expense	296,034
Less test year expense	<u>(550,005)</u>
Adjustment	<u>(\$253,971)</u>

(8)
Insurance Expense

To adjust test year insurance expense for current premiums.

Pro forma insurance expense	\$300,000
Less test year expense	<u>(130,000)</u>
Adjustment	<u>\$170,000</u>

(9)

IDEM Fee

To adjust test year IDEM regulatory fee expense for pro forma expense.

Current number of water utility connections (as of 8/31/06)	18,968	
Rate per connection	\$0.95	
Sub-total	18,020	
Less test year expense	(\$16,650)	
Adjustment		\$1,370

(10)

Utility Receipts Tax

To adjust test year Indiana Utility Receipts Tax expense for pro forma calculation.

	Pro forma Present Rate	Pro Forma Proposed Rate
Pro forma metered revenues	\$5,198,430	\$7,352,980
Less: pro forma public metered revenues	173,382	247,538
Less: pro forma Public fire protection revenues (paid by customers > taxable)		
Less exemption	1,000	1,000
Sub-total	5,024,047	7,104,442
Times 1.4%	1.40%	1.40%
Sub-total	70,337	99,462
Less test year expense	59,287	70,337
Adjustment	\$11,050	\$29,126

(11)

Depreciation Expense

To adjust test year depreciation expense for current depreciable assets

Utility Plant in Service at 8/31/06	\$43,433,845
Add: Capitalized item (adjustment 4)	4,455
Less: Land (per Petitioner's rate study)	597,370
Depreciable Assets	42,840,930
Times depreciation rate	2.00%
Pro forma depreciation expense	856,819
Less: Test Year	717,765
Adjustment	\$139,054

(12)

Valve Turning Program

To increase expenses for valve turning program (increases valve turning from once every 8 years to once every 4 years.) as recommended by OUCC engineer.

One additional employee - grade level 10, with average benefits (27% of salary) + uniform & training (5%)	\$50,736
Equipment - truck & attachment tool - depreciation over 10 years*	6,264
* see settlement agreement	\$57,000

**Elkhart Municipal Water Utility
CAUSE NUMBER 43191**

Extensions and Replacements

To reflect the average amount of extension and replacements required over a four year period

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Total</u>
<u>Average annual additions to utility plant</u>	\$298,580	\$298,580	\$298,580	\$298,580	\$1,194,320
North main pump station rehabilitation	1,300,000				1,300,000
Northeast elevated storage tank (1 MG) - Design	172,650				172,650
Supervisory control and data acquisition upgrades	20,000				20,000
Ash road 16" river crossing - US 20 to CR 16	679,090				679,090
Hubbard Ave. revitalization - water main replacement	315,000				315,000
Hudson St. - water main replacement	445,000				445,000
Northeast elevated storage tank (1MG)- land Acq.		40,000			40,000
Southeast elevated storage tank (.75MG) - design		172,650			172,650
Beardsley Ave. revitalization - water main replacement		360,000			360,000
Crawford St. revitalization - water main replacement		330,000			330,000
Johnson St. widening - new 20" water main		510,000			510,000
Northeast elevated storage tank (1 MG)			2,129,350		2,129,350
Southeast elevated storage tank (.75 MG) - land acq.			40,000		40,000
Kilbourn Ave. revitalization - water main replacement			435,000		435,000
Fulton St. revitalization - water main replacement			640,000		640,000
24" water main - CR 13 loop			1,726,500		1,726,500
24" river crossing @ Okema & Edgewater			345,300		345,300
24" water main - Rainbow Bend & Dorsey			471,910		471,910
Southeast elevated storage tank (.75 MG)				1,553,850	1,553,850
S. Michigan St. - water main replacement				415,000	415,000
24" water main - SR 19 from Lusher to Franklin				354,075	354,075
24" water main - Pennsylvania & Okema				805,700	805,700
Debt Serv after Debt Serv funding requirements are met	0	(821,000)	(821,000)	(821,000)	(2,463,000)
Total	<u>3,230,320</u>	<u>890,230</u>	<u>5,265,640</u>	<u>2,606,205</u>	<u>11,992,395</u>
Less available depreciation cash ¹					<u>(1,668,734)</u>
					10,323,661
Divide by 4 Years					4
Average Annual Extensions and Replacements					<u><u>2,580,915</u></u>

¹ March 31, 2007 Fund (603) balance per city's cash balance

Elkhart Municipal Water Utility
CAUSE NUMBER 43191

Current and Proposed Rates and Charges

(A) Metered Rates:

<u>Block Schedule</u>		<u>Current</u>	<u>Petitioner Proposed</u>	<u>Proposed Settlement</u>
First	40	\$1.04	\$1.51	\$1.48
Next	740	0.80	1.16	1.14
Next	680	0.64	0.93	0.91
Over	1,460	0.54	0.78	0.77

(B) Service Charge

5/8	Inch Meter	\$1.60	\$2.32	2.28
3/4	Inch Meter	1.75	2.54	2.50
1	Inch Meter	2.15	3.12	3.07
1 1/2	Inch Meter	3.27	4.74	4.67
2	Inch Meter	4.83	7.00	6.90
3	Inch Meter	9.31	13.50	13.29
4	Inch Meter	15.59	22.61	22.26
6	Inch Meter	33.51	48.59	47.84
8	Inch Meter	58.59	84.96	83.65

<u>Minimum Charge</u>		<u>Water Allowed (CCF)</u>	<u>Current</u>	<u>Petitioner Proposed</u>	<u>Proposed Settlement</u>
5/8	Inch Meter	4	\$5.76	\$8.36	8.22
3/4	Inch Meter	6	7.99	11.6	11.41
1	Inch Meter	10	12.55	18.22	17.92
1 1/2	Inch Meter	20	24.07	34.94	34.36
2	Inch Meter	32	38.11	55.32	54.41
3	Inch Meter	60	66.91	97.1	95.53
4	Inch Meter	100	105.19	152.61	150.18
6	Inch Meter	200	203.11	294.59	289.98
8	Inch Meter	320	324.19	470.16	462.85

**Elkhart Municipal Water Utility
CAUSE NUMBER 43191**

Current and Proposed Rates and Charges

(D)	Fire Hydrants		Present		Petitioner Proposed		Proposed Settlement	
			Annual Charge	Monthly Charge	Annual Charge	Monthly Charge	Annual Charge	Monthly Charge
	Municipal and Public							
5/8	Inch Meter		\$23.52	\$1.96	\$34.08	\$2.84	\$33.58	\$2.80
3/4	Inch Meter		25.8	2.15	37.44	3.12	36.83	3.07
1	Inch Meter		32.88	2.74	47.64	3.97	46.94	3.91
1 1/4	Inch Meter		37.56	3.13	54.48	4.54	53.62	4.47
1 1/2	Inch Meter		42.36	3.53	61.44	5.12	60.48	5.04
2	Inch Meter		68.16	5.68	98.88	8.24	97.31	8.11
3	Inch Meter		258.48	21.54	374.76	31.23	369.03	30.75
4	Inch Meter		329.04	27.42	477.12	39.76	469.77	39.15
6	Inch Meter		493.56	41.13	715.68	59.64	704.66	58.72
8	Inch Meter		681.48	56.79	988.2	82.35	972.95	81.08
	Private Hydrants - Per Hydrant		\$239.63	\$19.97	\$347.52	\$28.96	342.12	28.51
	Private Fire Protection Service							
2	Inch Meter		\$26.36	\$2.20	\$38.28	\$3.19	37.63	3.14
4	Inch Meter		105.44	8.97	156.12	13.01	150.54	12.81
6	Inch Meter		239.63	19.97	347.52	28.96	342.12	28.51
8	Inch Meter		426.55	35.55	618.60	51.55	608.99	50.75
10	Inch Meter		666.18	55.52	966.00	80.50	951.11	79.27
12	Inch Meter		958.54	79.88	1,389.96	115.83	1,368.51	114.04

(E) Temporary Users

Water furnished to temporary users, such as contractors, etc. shall be charged on the basis of the metered rates as metered or estimated by the utility manager.

**Elkhart Municipal Water Utility
CAUSE NUMBER 43191**

Current and Proposed Rates and Charges

(F) Swimming Pool Filling Policy

The Water Works will fill swimming pools as a convenience to customers during weekday evenings and on Saturdays. By filling during these times there will be no reduction in service during normal hours.

Charges for this service include a base charge plus a charge for the water and labor.

For All Pools	Current Charge	Petitioner Proposed	Proposed Settlement
Truck Rental	\$6.00	\$6.00	\$6.00
Hose & Hydrant Fitting Rental	6.00	6.00	6.00
Hydrant Use Fee	9.00	9.00	9.00
Total Basic Charge	\$21.00	\$21.00	\$21.00

Additional Charges:

Labor: Actual Time spent on job @ \$18.00/hr per employee

Water: Actual Number of gallons used to fill pool charged according to the current schedule of rates

Non-Recurring Charges

	Current Charge	Petitioner Proposed	Proposed Settlement
1 Contract Charge for New Accounts or to Change Account (Included in first monthly billing)	\$7.50	\$7.50	\$7.50
2 Collection of Delinquent Bill in Lieu of Turn-off	7.50	7.50	7.50
3 Installation of Remote Meter Reading Device	39.00	39.00	39.00
4 Relocation of Remote Reading Device	15.00	15.00	15.00
5 Location of Services, Valves, Curb Stops, Mains	20.00	20.00	20.00
6 Charge for Resealing Meter	15.00	15.00	15.00
7 Meter Repair due to Frozen Meter			
5/8" Meter	25.00	To be addressed later in a 30-day filing	
3/4" Meter	45.00		
1" Meter	50.00		
1-1/2" Meter	120.00		
2" Meter	163.00		

**Elkhart Municipal Water Utility
CAUSE NUMBER 43191**

Current and Proposed Rates and Charges

		<u>Current Charge</u>	<u>Petitioner Proposed</u>	<u>Proposed Settlement</u>
8 Meter Testing Charge				
	5/8" Meter	20.00	To be addressed later in a 30- day filing	
	3/4" Meter	20.00		
	1" Meter	20.00		
	1-1/2" & 2" Meter	34.00		
	3" & 4" Meter	225.00		
	6" Meter	400.00		
9	Service Call - Reconnect Service turned off for Cause	15.00		
			\$78.30	
10	Service Call - Outside regular working hours	20.00	(minimum)	
11	Service Line Repairs - Current equipment and labor costs, material costs plus 20% overhead. (Emergencies)			
12	Special Meter Reading (Customer Convenience)	10.00	10.00	10.00
13	Sprinkling Meter Turn-on or Turn-off	15.00	15.00	15.00
14	Turn-on of service outside regular hours	20.00	20.00	20.00
15	Turn-on or turn-off at service customer's convenience	15.00	15.00	15.00
			To be addressed later in a 30- day filing	
16	Bad Check Charge			
17	Delinquent Charge - Billings			
	All billings not paid within 17 days of the billing date are subject to a late payment charge of 10% on the first \$3.00 and 3% of the balance over \$3.00.			
18	Tap Charges - Residential		nothing listed	
	5/8" Meter			
	3/4" Meter	350		
	1" Meter	390		
	1-1/2" Meter	450		
	2" Meter	485		
	Tap Charges - Large Taps - Commercial/Industrial			
	See attached schedule - No changes proposed in this filing			
19	Permanent Disconnection before demolition	\$75.00		
20	Fire Hydrant Use Permit	\$9.00 + Water Used		

**Elkhart Municipal Water Utility
CAUSE NUMBER 43191**

Current and Proposed Rates and Charges

		Petitioner Proposed	Proposed Settlement
Not Listed:	Lab Testing	To be addressed later in a 30- day filing	
	Deposits		
	Compact Fee	Eliminated	

Miscellaneous Prices / Charges

Meter Repair & Accessories		<u>Current Charge</u>		
Meter Yokes:	3/4" Pipe x 5/8" Meter	20.00	20.00	20.00
	3/4" Pipe x 3/4" Meter	24.00	24.00	24.00
	1: Pipe x 1" Meter	35.00	35.00	35.00
Loc Paks:	1 1/2" for Copper	35.00	35.00	35.00
	1 1/2" for Galvanized	36.50	36.50	36.50
	2" for Copper	37.00	37.00	37.00
	2" for Galvanized	40.00	40.00	40.00
Remote Reading Head for new meters (add to above price)		26.00	26.00	26.00
Meter & Remote read-out device installed in MeterYoke furnished and installed by customer		39.00	39.00	39.00

PUBLIC'S EXHIBIT NO. 2

Cause No. 43191

PREFILED TESTIMONY OF JUDITH I. GEMMECKE IN SUPPORT
OF JOINT STIPULATION AND SETTLEMENT AGREEMENT

FILED ON BEHALF OF THE INDIANA

OFFICE OF UTILITY CONSUMER COUNSELOR

**TESTIMONY OF JUDY GEMMECKE IN SUPPORT OF
JOINT STIPULATION AND SETTLEMENT AGREEMENT**

CAUSE NO. 43191

CITY OF ELKHART WATER UTILITY

I. Introduction

1
2 **Q: Please state your name and business address.**

3 A: My name is Judith I. Gemmecke and my business address is Indiana Government
4 Center North, Room N501, 100 North Senate Avenue, Indianapolis, Indiana 46204.

5 **Q: By whom are you employed and in what capacity?**

6 A: I am employed by the Indiana Office of Utility Consumer Counselor ("OUCC") as a
7 Senior Utility Analyst.

8 **Q: Please describe your credentials.**

9 A: I graduated from Indiana University in Bloomington, Indiana in May 1983, with a
10 Bachelor of Science degree majoring in public administration with a concentration
11 in public finance. I obtained a certificate in accounting from Indiana University,
12 South Bend in January 1990, at which time I accepted a seasonal position with
13 Coopers & Lybrand as part of its auditing staff. From September 1990 until March
14 1999, I held the position of field auditor for the Indiana Department of Revenue. In
15 March 1999, I accepted a position as a staff accountant (now Utility Analyst) with
16 the OUCC. Since joining the OUCC I have attended the NARUC Annual

1 Regulatory Studies Program and the NARUC Utility Rate School as well as other
2 educational programs and studies.

3 **Q: Do you hold any professional licenses?**

4 A: I am licensed in the State of Indiana as a Certified Public Accountant. I am also a
5 certified grant administrator.

6 **Q: What have you done to prepare your testimony in this proceeding?**

7 A: I reviewed Petitioner's testimony and schedules filed in this cause as well as
8 workpapers filed by Petitioner. I reviewed Petitioner's books and records at their
9 office on April 22 and 23, 2007. Additionally, I participated in preparing
10 discovery questions and reviewed Petitioner's responses. I also met with OUCC
11 staff members and Petitioner's representatives to discuss issues and to negotiate a
12 compromised settlement of this rate case.

13 **II. PURPOSE OF TESTIMONY**

14 **Q: What is the purpose of your testimony in this proceeding?**

15 A: I discuss the water utility's test year and *pro forma* revenues and non-recurring
16 fees and compare them to amounts agreed upon in settlement. Next, I discuss the
17 agreed elimination of Elkhart's "compact fee" for water-only customers located
18 outside the city limits. Finally, I explain why the proposed settlement serves the
19 public interest.

1 **Q: Are there any schedules and/or attachments included with your testimony?**

2 **A: Yes. I have one attachment:**

3 Attachment JIG-1 – Ordinances pertaining to Compact Fee

4 **III. NEGOTIATED SETTLEMENT**

5 **Q: Have the OUCC and the Petitioner reached a settlement agreement in this**
6 **Cause?**

7 **A: Yes.**

8 **Q: Does your testimony reflect those items included in the settlement?**

9 **A: Yes. In settlement, Petitioner accepted all of the OUCC's proposed accounting**
10 adjustments. In turn, the OUCC allowed Petitioner to receive additional funds to
11 improve its valve turning program to meet maintenance recommendations made
12 by OUCC witness, Harold L. Rees.

13 **IV. INCOME STATEMENT PRESENTATION**

14 **Q: Please explain how the OUCC presented Petitioner's test year income**
15 **statement.**

16 **A: I provided a detailed list of metered revenue and non-recurring fee income on**
17 Schedule 3. This detail was taken from the Petitioner's billing report summaries.
18 However, I presented operating expense data by account, instead of listing
19 amounts by sub-categories, as the Petitioner did (e.g., Lab, and Pretreatment,

1 Water Treatment, Transmission and Distribution, Customer Accounts, and
2 Administrative and General).

3 **Q: Please explain any significant differences between Petitioner's Income**
4 **Statement and the Income Statement prepared by the OUCC.**

5 A: In addition to the above differences in presentation, the OUCC arrived at different
6 revenue figures than the Petitioner did. The OUCC used the billing summaries
7 for twelve months ending August 31, 2006 as the basis for its test year revenue
8 amounts, while also adding in \$4,775 in revenue for biological analysis not billed
9 through Petitioner's regular billing methods.

10 **Q: Was there a significant difference in the test year revenue figures you**
11 **computed, as compared to the test year revenue figures Petitioner used?**

12 A: Yes. The amount I computed for test year Metered Revenue is \$511,380 less than
13 the amount the Petitioner used. Also, the figure I used for Other Miscellaneous
14 Revenue during the test year is \$389,736 less than the dollar amount the Petitioner
15 used.

16 **Q: If the differences you found in revenues were the only changes to Petitioner's**
17 **schedules, what effect would that difference have had on the calculated rate**
18 **increase?**

19 A: If these were the only adjustments the OUCC made to Petitioner's projected rate
20 calculations, Petitioner's proposed rate increase would jump from 49.28%, as
21 calculated by Petitioner, to 72.34%, to generate an additional \$909,890 in
22 revenues (including \$8,774 for increased utility receipts tax, or "URT").

1 Of that difference, \$250,400 is money collected for Indiana's state sales tax. The
2 amount of sales tax billed or collected should not be included in utility revenues.
3 Sales tax is collected in trust on behalf of the Indiana Department of Revenue and
4 all amounts collected are paid over to the State of Indiana. Therefore, the amount
5 collected (and ultimately remitted to the state) to pay Petitioner's sales tax
6 liability should not be counted by the Petitioner as revenue (or as an expense).

7 Another significant part of the difference in revenue may be due to the City of
8 Elkhart's collection of Compact Fees of \$277,750 (as more fully discussed later in
9 this testimony).

10 Most of the remaining difference is tied to non-metered and private fire service
11 revenues totaling \$372,102, leaving only an \$864 difference to explain. After
12 auditing Petitioner's financial records, I believe that Petitioner started with
13 customer receipts (*i.e.*, cash paid by customers to satisfy utility bills); made
14 adjustments for metered revenue accruals; and presented the result as Metered
15 Sales and Public Fire Hydrant Charges. Thus, Petitioner's presentation of
16 Metered Revenues is overstated by the amount of the other charges (*i.e.*, Private
17 Fire Hydrant Charges and other miscellaneous revenue). A comparison of test
18 year income statements presented by the OUCC and Petitioner is shown in
19 Schedule 3.

1

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14

21

¹ IURC Cause No. 40801

1 **Q: Did the OUCC propose any additional adjustments to test year revenue?**

2 A: Yes. I made adjustments for public fire protection (hydrant) revenue and private
3 fire service revenue. As shown on Schedule 5, Adjustments 2 & 3, a twelve-
4 month revenue total was calculated using Petitioner's records for the 12 months
5 ending February 28, 2007. The resulting adjustments to test year revenues reflect
6 fixed, known, and measurable changes to these revenue items within 12 months of
7 the test year (8/31/06).

8 **Q: Why have you not performed a customer normalization revenue adjustment?**

9 A: A customer normalization adjustment provides that additional customers have
10 become customers during the test year and therefore a full year's worth of
11 revenue can be anticipated in the next year. However, in the case of Petitioner's
12 customer base, it was found that the fluctuations were seasonal – about 300
13 customers leaving in the winter and returning in the summer. This sort of ebb and
14 flow of customers should not be normalized within the test year because it
15 happens every year. Therefore, test year metered revenues were found to be
16 indicative of future revenues, with the adjustment made for the "Suburban"
17 revenues previously mentioned.

VI. Compact Fees

1

2 **Q: Has the issue of the Compact Fee been settled between Petitioner and the**
3 **OUCC?**

4 A: Yes. In settlement, Petitioner agreed that it would no longer charge a compact fee
5 to "water-only" customers located outside Elkhart's municipal boundaries.

6 **Q: Absent the Settlement reached in this case, what amount of compact fees or**
7 **charges would Elkhart's out-of-city, water &/or sewer utility customers have**
8 **had to pay?**

9 A: Ordinance No. 4528 requires payment of an amount equal to 75% of the property
10 taxes the landowner would otherwise have had to pay to the City if the subject
11 property were located inside the city limits.

12 **Q: How are compact fees billed?**

13 A: The charge appears on monthly water utility bills (or on combined water and
14 sewer utility bills, if applicable).

15 **Q: Do compact fee obligations ever expire?**

16 A: Yes, they expire fifteen (15) years after the agreement is signed -- or sooner, if the
17 property is annexed into the City before then.

18 **Q: What amount of compact agreement revenue will the Water Department lose**
19 **when compact fees and charges are eliminated for its water-only customers**
20 **under the proposed Settlement?**

21 A: During the test year, Elkhart billed \$277,750 in compact fees. During the six
22 months since the end of Elkhart's test year (*i.e.*, September, 2006 through
23 February, 2007), Elkhart billed another \$195,500 in compact fees. Despite those

1 large fee totals, Petitioner's water utility will not lose any operating revenue, since
2 all compact fees collected are currently paid into the Greater Elkhart Fund -- not
3 reserved for municipal water or other utility expenses.² The Greater Elkhart Fund
4 was established "to fund, partially or wholly, any Downtown Development,
5 Neighborhood Development, Job Training/Placement, or Brownfields
6 Development in the City of Elkhart or any other developments benefiting the City
7 of Elkhart." The "uses of funds" section on pages 2 & 3 of Ordinance 4528
8 provides additional detail. (Copies of Ordinances 4393 and 4528 are attached to
9 this testimony as Attachment JIG-1.)

10 **Q: Is the compact fee similar to a System Development Charge?**

11 A: No. It is different on several points:

- 12 1. It is not used to fund utility infrastructure related to growth.
- 13 2. Not every new customer is charged the fee -- only those located outside the
14 city limits.
- 15 3. It is not a "non-recurring" fee. It is a monthly charge.
- 16 4. It is not a set amount -- it changes as the assessed value and/or the city
17 property tax rate changes.
- 18 5. It is not cost-based (not based on costs of extending or providing utility
19 service -- and not based on any costs specific to the Greater Elkhart Fund).

20 **Q: Will the Settlement prevent the Petitioner from charging compact fees to out-**
21 **of-city sewer utility or combined water/sewer utility customers?**

² As of March 31, 2007, the Greater Elkhart Fund had a balance of \$1,008,809, as shown on www.elkhartindiana.org/egov/docs - March 2007 Financials.

1 A: No. Under Ind. Code 36-4-3-21, the City of Elkhart will continue to have
2 authority to collect those charges from any sewer utility customers located outside
3 Elkhart's corporate limits, regardless of whether they also receive water utility
4 service from Elkhart.

5 The Settlement will prevent Elkhart from charging compact fees to the 180
6 (approx.) customers located outside the city limits that only receive water utility
7 service. However, since the Commission does not regulate municipal sewer
8 utilities, it would still be free to collect compact fees from its 160 (approx.)
9 municipal sewer utility customers located outside the city limits, regardless of
10 whether they also receive water utility service from Elkhart.

11 **VII. PUBLIC INTEREST ANALYSIS**

12 **Q: Do you believe that the proposed Settlement serves the public interest and**
13 **should be approved by the Commission?**

14 A: Yes, I do. The Petitioner accepted the OUCC's adjustments to its *pro forma*
15 revenue requirement, slightly reducing the requested rate increase. The Petitioner
16 also agreed to waive the compact fee for all 180 "water-only" utility customers
17 located outside the city limits. That will provide significant savings for those
18 customers.

19 It may seem unfortunate that "outside" customers receiving sewer utility service
20 (with or without water utility service) from Elkhart will still have to pay the
21 compact fee. However, since the IURC lacks jurisdiction over municipal sewer
22 utilities, that disparity in regulatory result is inevitable.

1 Elkhart also agreed to comply with operational requirements requested by OUCC

2 Witness, Harold L. Rees.

3 **Q: Does this conclude your testimony?**

4 **A: Yes.**

Proposed Ordinance No. 98-O-60-R

ORDINANCE NO. 4393

**AN ORDINANCE PROVIDING A
PROCEDURE FOR UTILITY EXTENSIONS TO
BE KNOWN AS THE ELKHART COMPACT**

WHEREAS, there currently is a large amount of anti-city efforts directed towards modifying annexation laws that would result in the stifling of city growth and progress unless cities proactively take action to preserve their ability to expand and improve.

WHEREAS, the current statutory framework at I.C. 36-4-3-21 allows cities flexibility in addressing these anti-city efforts.

WHEREAS, the provision of services to entities that are not contiguous to the City of Elkhart and thus cannot be voluntarily annexed, shall only be provided in a manner that is equitable to City taxpayers.

NOW, THEREFORE, BE IT ORDAINED BY THE COMMON COUNCIL OF THE CITY OF ELKHART, INDIANA, THAT:

Section 1. Definition. For the purpose of this Ordinance, the definition of "contiguous" is stated at I.C. 36-4-3-1.5, as amended.

Section 2. Contiguous Real Estate. The City of Elkhart shall not extend any water or sewer utilities to an entity if the subject real estate owned by the entity is contiguous to the City of Elkhart unless such entity petitions the City to annex the subject real estate, and commits to pursue such petition until the subject real estate is annexed into the City of Elkhart. After the petition to annex is filed, and before the

annexation is finalized, the entity shall pay the charges described at Subsection 3(b).

Section 3. Non-Contiguous Real Estate.

a. **Requirements.** The City of Elkhart shall not extend any water or sewer utilities to real estate that is not contiguous to Elkhart prior to:

(1) the submission by the entity that owns the real estate of an inducement resolution to the Common Council;

(2) the approval of the inducement resolution by the Common Council; and

(3) the execution of the Agreement required and described at Subsection 3(c).

b. **Inducement Resolution.** The inducement resolution shall state that the entity desires to have the subject real estate annexed into the City of Elkhart but cannot since the subject real estate owned by the entity is not contiguous. The inducement resolution shall further state that should the subject real estate ever become contiguous to the City of Elkhart, within sixty (60) days of notification to the property owner of the date it becomes contiguous, the entity shall file a petition to voluntarily annex the subject real estate and pursue such petition until such real estate is annexed.

c. **Agreement.** The entity must execute an agreement with the City of Elkhart that requires the entity to pay to the City an amount equal to 75% of the amount of each annual assessment of Elkhart City taxes that would be assessed on the subject real estate if the subject real estate was located within the City. The Agreement shall require the entity to record the Agreement, as a real estate restriction

to run with the land, and require that the obligations shall apply to all successors in title of any portion of the real estate. The Agreement shall contain terms that state any amount not paid by the due date shall be considered delinquent. The delinquent charge shall be ten (10%) percent of the delinquent amount and shall be added to the total amount due. The Agreement shall also state that the delinquent amount together with any delinquent penalties, costs, and other expenses of collection may be collected by the City by any lawful remedy including the placing and foreclosure of real estate liens for the delinquent amount. The Agreement shall also require the entity to perform all obligations and promises of the entity required to be, or otherwise contained in the Agreement.

d. Consent to Agreements. The Common Council hereby consents to any and all present and future agreements entered into by the Board of Public Works that contain terms described at Section 3 of this Ordinance. The Common Council shall be apprised of all executed agreements pertaining hereto.

e. Current Agreements and Current Extensions. This Ordinance shall not affect any existing sewer service agreement or sewer reimbursement agreement that has been executed prior to the effective date of this Ordinance. This Ordinance also shall not apply to owners of real estate that is adjacent to existing utility trunk extensions as of the date of this Ordinance.

Section 4. Section 6.5 of Ordinance No. 4187 is hereby amended to read as follows:

6.5 Extensions Outside City Limits

If a location is outside the City corporate limits
but within four (4) miles of such limits and

within the facility planning area of the City's POTW, then the City may extend wastewater service to any such location, providing for payment of capital costs expenditures of any such extension through the applicable Barrett Law procedures or by contract with the property owners. Any such contract for extension of services shall be entered into between the City by its Board of Public Works and the property owner upon such terms and conditions as may be deemed necessary by such Board, and shall include an agreement by the property owner to waive any and all right to challenge any future attempted annexation of the subject property by the City and shall may provide for the payment of regular sewer user fees three (3) times that which would be paid for like services delivered to users within the City's corporate limits.

Section 5.

a. The Great Elkhart Fund is hereby established. All amounts paid by the entity pursuant to the Agreement described at Section 3 shall be deposited to the Great Elkhart Fund, a non-reverting designated fund.

b. The proceeds of the Great Elkhart Fund shall be only used to fund partially or wholly any Downtown Development, Neighborhood Development, Job Training/Placement, or Brownfields development in the City of Elkhart including but limited to any the following:

(1) Any use described under the Economic Development Income Tax Statute at 6-3.5-7-13.1, as amended; and/or

(2) Any use pursuant to the redevelopment powers and uses described at 36-7-14- et.seq, which shall be read as if all city administrative agencies shall have said powers, and are able to implement said uses.

Section 6. This Ordinance shall go into effect after publication pursuant
to law.

ORDAINED this 14th day of December, 1998.

Mary M. Olson
Mary M. Olson,
President of the Common Council

ATTEST:

Sue M. Beadle
Sue M. Beadle, City Clerk

PRESENTED to the Mayor by me this 16th day of
December, 1998.

Sue M. Beadle
Sue M. Beadle, City Clerk

APPROVED by me this 21st day DECEMBER, 1998.

James P. Perron
James P. Perron, Mayor

ATTEST:

Sue M. Beadle
Sue M. Beadle, City Clerk

Proposed Ordinance No. 00-O-73

ORDINANCE NO. 4528

**AN ORDINANCE AMENDING ORDINANCE NO. 4393
PROVIDING A PROCEDURE FOR UTILITY EXTENSIONS
OUTSIDE THE CORPORATE LIMITS OF THE CITY OF ELKHART
AND ESTABLISHING THE ELKHART COMPACT PROGRAM**

WHEREAS, the Elkhart Common Council adopted Ordinance No. 4393 on December 14, 1998, providing a procedure for utility extensions to areas outside the corporate limits of the City of Elkhart and establishing the Elkhart Compact Program;

WHEREAS, said Ordinance authorizes the provision of water and sewer utility services to entities that are not contiguous to the corporate limits of the City of Elkhart upon terms and conditions that are equitable to the taxpayers of the City of Elkhart;

WHEREAS, said Ordinance requires entities to pay to the City of Elkhart an amount equal to 75% of the amount of each annual assessment of Elkhart City taxes that would be assessed on the subject real estate if the subject real estate was located in the City of Elkhart;

WHEREAS, payments made in lieu of taxes to the City of Elkhart are placed in the Greater Elkhart Fund, which proceeds are used to fund, partially or wholly, any downtown development, neighborhood development, job training/placement, or brownfield development projects in the City of Elkhart; and

WHEREAS, the Elkhart Common Council has determined that proceeds of the Greater Elkhart Fund should be used to fund other development projects benefitting the City of Elkhart.

NOW, THEREFORE, BE IT ORDAINED BY THE COMMON COUNCIL OF THE CITY OF ELKHART, INDIANA, THAT:

Section 1. Section 5(b) of Ordinance No. 4393 is hereby deleted in its entirety and replaced with the following:

"b. The proceeds of the Greater Elkhart Fund shall be used to fund, partially or wholly, any Downtown Development, Neighborhood Development, Job Training/Placement, or Brownfields Development in the City of Elkhart or any other developments benefitting the City of Elkhart, including but not limited to, any of the following:

- (1) Any use described under the Economic Development Income Tax statute at Indiana Code 6-3.5-7-13.1, as amended; and/or
- (2) Any use pursuant to the redevelopment powers and uses described at Indiana Code

36-7-14 *et seq.*, which shall be read as if all
City administrative agencies shall have said
powers, and are able to implement said uses.

Section 2. This Ordinance shall be in full force and effect from and
after its passage by the Common Council of the City of Elkhart, Indiana, signature
by the Mayor, and publication pursuant to Indiana Code 5-3-1.

PASSED this 16th day of OCTOBER, 2000.)

Mary M. Olson
Mary M. Olson,
President of the Common Council

ATTEST:

Sue M. Beadle
Sue M. Beadle, City Clerk

PRESENTED to the Mayor by me this 20th day of
October, 2000.

Sue M. Beadle
Sue M. Beadle, City Clerk

APPROVED by me this 20 day OCTOBER, 2000.

David L. Miller
David L. Miller, Mayor

ATTEST:

Sue M. Beadle
Sue M. Beadle, City Clerk

PUBLIC'S EXHIBIT NO. 3

Cause No. 43191

PREFILED TESTIMONY OF HAROLD L. REES IN SUPPORT
OF JOINT STIPULATION AND SETTLEMENT AGREEMENT

FILED ON BEHALF OF THE INDIANA

OFFICE OF UTILITY CONSUMER COUNSELOR

**TESTIMONY OF HAROLD L. REES IN SUPPORT OF
JOINT STIPULATION AND SETTLEMENT AGREEMENT**

CAUSE NO. 43191

CITY OF ELKHART WATER UTILITY

I. INTRODUCTION

1

2 **Q: Please state your name and business address.**

3 A: Harold L. Rees; Indiana Government Center North, Room N501; 100 North Senate
4 Avenue; Indianapolis, Indiana, 46204-2215.

5 **Q: By whom are you employed and in what capacity?**

6 A: I am employed by the Indiana Office of Utility Consumer Counselor ("OUCC") as a
7 Senior Utility Analyst for the Water/Wastewater Division.

8 **Q: Please describe your background and experience.**

9 A: I graduated from Purdue University with a Bachelor of Science degree in Electrical
10 Engineering. I also completed a management development program at Wabash College.
11 Furthermore, I worked for the Indiana Bell Telephone Company from 1960 through 1991
12 where I was involved in several engineering and management assignments. In addition, I
13 began employment with the OUCC in January of 1992. I obtained my Professional
14 Engineer registration in the State of Indiana in 1967.

15 **Q: What have you done to increase your knowledge of water utility technology and**
16 **operations?**

1 A: To increase my knowledge of water utility plant design and operations, this year I
2 attended several presentations at the annual meeting of the Indiana Section of the
3 American Water Works Association ("AWWA") and participated in a seminar on storage
4 tank maintenance sponsored by the Alliance of Indiana Rural Water Companies.

5 Q: Have you previously testified before this Commission?

6 A: Yes, I have testified in Causes concerning gas, water, electric, and telephone utilities.

7 Q: What have you done to prepare your prefiled testimony for this proceeding?

8 A: I read the verified Petition for Cause No. 43191 filed on December 11, 2006, which
9 requested authority for the City of Elkhart to increase its rates and charges for water
10 utility service. Further, I read the Pre-hearing Conference Order approved on January 24,
11 2007; the Annual Report to the IURC for the Year 2005; the testimonies and attachments
12 that were submitted in this proceeding on behalf of the City of Elkhart Municipal Water
13 Utility ("Elkhart"), including the Master Plan for Water Supply & Distribution (January
14 2002) prepared by Malcolm Pirnie, Inc.; and Elkhart's responses to the OUCC Data
15 Requests that were issued in this Cause. Since my testimony references Elkhart's
16 responses to several questions included in OUCC Data Request Sets No. 1 and No. 3, I
17 have included copies of Elkhart's responses to those questions as Attachment 1 to this
18 testimony. Also, on March 29, 2007, I participated in on-site discussions with Laura
19 Kolo, the Director of the Office of Public Works for the City of Elkhart, and toured the
20 plant and facilities of the water utility with Daniel Pasternak, Maintenance Supervisor.
21 Finally, I met with Petitioner's representatives to explore possible settlement of this
22 Cause.

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1 meet a demand of about 8.7 MGD. The wells have a firm capacity of 21.7 MGD. The
2 utility's total treatment capacity is about 25 MGD. The total storage capacity in the
3 system is 8.5 MG.

4 The City is constructing a 24" pressure loop of mains inside its corporate limits. This
5 multi-phased project should mitigate current pressure and flow deficiencies in the system.
6 Most water meters are located inside homes and buildings to prevent freezing during the
7 winter months. About 97% of Elkhart's water meters employ radio-read technology. A
8 few manually read meters are used for large applications.

9 **IV. PROPOSED CAPITAL IMPROVEMENT PROJECTS**

10 **A. Overview of Projects**

11 **Q: Please describe the capital improvement projects Elkhart plans to fund in this rate**
12 **case.**

13 **A:** Elkhart has proposed several capital improvement projects to be implemented over a
14 four-year period (2007 – 2010) at an estimated cost of \$13,261,075. (See Petitioner's
15 Exhibit EH-2.)

16 **Q: What work is proposed for fiscal year 2007?**

17 **A:** The projects planned for fiscal year 2007 include rehabilitation of the North Main Pump
18 Station, the design phase of a new elevated 1.0 MG Northeast ("NE") Storage Tank,
19 upgrades to the utility's Supervisory Control and Data Acquisition ("SCADA") system,
20 and several main projects that extend the looping of the utility's mains and replace some
21 of the old cast iron mains that are subject to breakage. The looping work will both

1 improve the reliability of the distribution system and improve pressures under various
2 demand levels. Much of the water main work in the capital improvement program will
3 be coupled with previously planned sewer and street improvement projects, allowing the
4 water utility to reduce or avoid the cost of opening pavement and digging trenches.

5 **Q: What work is proposed for fiscal year 2008?**

6 A: Capital improvement projects planned for 2008 include land acquisition for the new NE
7 storage tank, design work on a proposed 0.75 MG Southeast ("SE") Elevated Storage
8 Tank, and several main projects.

9 **Q: What work is proposed for fiscal year 2009?**

10 A: The planned activities for 2009 include construction of the NE storage tank, land
11 acquisition for the SE storage tank, and several main projects continuing the distribution
12 system looping and old main replacement effort.

13 **Q: What construction is proposed for fiscal year 2010?**

14 A: Construction activities planned for 2010 include the completion of the SE storage tank
15 and additional main looping and replacement work.

16 **B. Pump Improvements**

17 **Q: Do you support Elkhart's proposed capital improvement projects for the North**
18 **Main Pump Station?**

19 A: I do, based on Elkhart's future demand projections. The improvements planned for the
20 North Main Pump Station, which pumps the largest share of Elkhart's drinking water,
21 appear to be badly needed. Petitioner engaged Greeley & Hansen to perform an

1 evaluation of the capital improvement needs of that facility and different ways to meet
2 those needs. The cost of various options considered increased with the degree of
3 rehabilitation or replacement, with an estimated cost of \$12M or \$13M to completely
4 relocate and replace the North Main Pump Station. Instead of complete replacement,
5 Elkhart selected the most comprehensive of the rehabilitation options considered, which
6 should meet the pump station's most critical capital improvement needs at a much lower
7 cost (approximately \$1.3M).

8 **C. Water Main Projects**

9 I support the water main projects in Elkhart's proposed capital improvement program.
10 Cumulatively, the projects will require a sizeable construction budget for a utility the size
11 of Elkhart (approximately \$8M). However, that cost is justified by the clear, underlying
12 need for the planned improvements. This work will not only improve the reliability of
13 the Elkhart water distribution system because of the loop connections it will establish; it
14 will also improve water supply, pressure, and fire protection capabilities in several areas
15 of the City.

16 **D. SCADA System Upgrade**

17 Likewise, I support the proposed upgrade of the utility's SCADA system (at an
18 estimated cost of \$20,000). The SCADA system allows operators to remotely monitor all
19 critical well field operations, control water storage tank levels, turn pumps on and off at
20 the pump stations, and monitor chemical concentrations. The system also performs other

1 functions, such as providing an alarm system for critical conditions. This improvement
2 will include an update of the existing SCADA software, which is nearly obsolete.

3 **E. New Elevated Storage Tanks**

4 **Q: Do you have any opinions concerning the need for the proposed new NE (1.0 MG)**
5 **and SE (0.75 MG) elevated storage tanks?**

6 **A:** The attachments to Mr. Horvath's testimony indicate that the proposed storage tanks will
7 help boost the water pressure to acceptable levels, provide ample fire protection storage,
8 ensure continuous water supply during peak demands, create additional capacity to
9 promote business development, and provide emergency reserves in the event of
10 mechanical failure at a pump station.

11 Expenditures for the two tanks will total approximately \$4.1M by the end of fiscal year
12 2010 – the end of Elkhart's 4-year capital improvement plan. The documentation in
13 Elkhart's filing (Exhibit EH-2) states that the NE tank is required to meet industry
14 standards for equalization storage and that the utility's system is currently 1.1 MG
15 deficient. This documentation also says that the SE tank is required to meet standards for
16 system pressures and that currently there is a significant area with pressures modeled
17 below 40 pounds per square inch (psi).

18 **Q: What industry standards should Elkhart be using?**

19 **A:** In general, Indiana water utilities use either American Water Works Association
20 (AWWA) standards or Ten States Standards, with the latter being the most common.
21 Indiana is one of the states that adopted the Ten States Standards in 1997, in a document
22 entitled "Recommended Standards for Water Works." There has been a tendency in

1 practice for these standards to be misquoted. Some may even appear to conflict with
2 other parts of the standards. For example, consider Paragraphs "b" and "c" in the
3 following section of the Ten States Standards (Part 7 – Finished Water Storage, Section
4 7.0.1 – Sizing):

5 Storage facilities should have sufficient capacity, as determined from
6 engineering studies, to meet domestic demands, and where fire protection
7 is provided, fire flow demands.

8 a. Fire flow requirements established by the appropriate state Insurance
9 Services Office should be satisfied where fire protection is provided.

10 b. The minimum storage capacity (or equivalent capacity) for systems
11 not providing fire protection shall be equal to the average daily
12 consumption. This requirement may be reduced when the source and
13 treatment facilities have sufficient capacity with standby power to
14 supplement peak demands of the system.

15 c. Excessive storage capacity should be avoided where water quality
16 deterioration may occur.

17 A utility may strive to meet an overall requirement for its system to have enough storage
18 for the average daily consumption (as required in Paragraph "b") by installing more water
19 tanks (usually elevated). However, if a tank is placed prematurely in an area of low
20 usage, it may fail the guideline in Paragraph "c," which is intended to avoid loss of
21 chlorine residual if the usage from the storage tank is too low, causing poor turnover.
22 Also, while Paragraph "b" is not intended for a utility that provides fire protection, it is
23 often used to evaluate water utilities with or without fire protection, especially if details
24 are not readily available from the Insurance Office.

25 Q: In your opinion, what aspects of the Ten States Standards are applicable to this
26 case?

1 A: While not technically applicable to Elkhart because it provides fire protection, the utility
2 is very close to meeting the requirement in Paragraph "b," for storage capacity to be
3 about equal to the average daily consumption (8.5 MG storage versus 8.7 MG average
4 consumption). Of the 8.5 MG figure, the utility has 6.0 MG of ground storage in three
5 tanks located at treatment plants with standby electric generators (the North Main Street
6 well field and the Northwest well field).¹ The Ten States Standards recognize the use of
7 standby power to supplement peak demands using water from wells, treatment plants, and
8 ground storage tanks

9 Q: Did you review any studies or reports concerning Elkhart's proposal to add two new
10 water storage tanks?

11 A: Yes, I reviewed the "Master Plan for Water Supply & Distribution 2001 – 2015," that
12 was completed for the City of Elkhart in January 2002 by Malcolm Pirnie, Inc. I also
13 reviewed more recent growth projections Elkhart prepared for the area, also supporting
14 placement of the two new water tanks.

15 Q: Was the Malcolm Pirnie report useful in reviewing whether Elkhart actually needs
16 to add both of the proposed elevated storage tanks (the NE and SE tanks) during the
17 next four years?

18 A: The January 2002 Malcolm Pirnie study provided a useful and significant update to
19 Elkhart's previous master plan (completed in 1986). However, five years have passed
20 since the 2002 study was completed, and system needs have changed.

¹ Those two facilities each have a large generator capable of simultaneously providing power to some of the well pumps and some of the high service pumps associated with ground storage tanks.

1 For example, of the fourteen main construction projects the City of Elkhart currently has
2 planned, only two were mentioned in the Malcolm Pirnie study. Since the other twelve
3 projects were not considered in that analysis, the 2002 Malcolm Pirnie report does not
4 reflect the water flow and pressure improvements expected to result from the extensive
5 main improvements Elkhart now plans to undertake.

6 As another example, the Malcolm Pirnie study showed pressure issues for the proposed
7 SE tank. However, of the customer complaints from that area identified in Elkhart's
8 response to OUCC Data Request Question 15, none involved reports of low water
9 pressure.²

10 Due to interim changes since the Malcolm Pirnie study was completed, I found Elkhart's
11 more recent growth projection data for those areas more helpful in analyzing whether
12 both of the proposed new tanks are actually needed, based on current growth projections.

13 **Q: The 2002 Malcolm Pirnie study used the term "Equalization Storage" in relation to**
14 **projected storage deficiency. Could you explain the meaning of that term?**

15 **A:** Malcolm Pirnie used the term "equalization storage"³ to denote the volume of water
16 needed to meet all hourly demands above the 24-hour average on the maximum usage
17 day. The study assumes that Elkhart's well fields and water treatment plants are sized to
18 meet the average demand on the maximum usage day, meaning that equalization storage

² The complaints are for the period beginning 9/3/2005 and ending 2/21/2006.

³ The "equalization storage" terminology and methodology used to justify capital improvement projects in Elkhart's Master Plan has not been widely used (if ever) in other Indiana water utility cases.

1 represents the additional water required above average daily usage levels to meet peak-
2 hour usage.

3 Table 3.1 in the Malcolm Pirnie study shows a projected increase in storage deficiency
4 from 1.1 MG in 2005 to 2.6 MG in 2015. The 2.6 MG deficiency projection is based on
5 a total storage capacity of 5.1 MG, less the elevated tank capacity of 2.5 MG. Given that
6 projection, the study recommended constructing three new tanks by 2015 (one at 1.0 MG
7 and two at 0.5 MG each). However, the study did not take into account the practical
8 implications of Elkhart having 6.0 MG of ground storage with back-up electric generators
9 for pumping. That extra 6.0 MG of ground storage should be enough to prevent any
10 actual storage deficiency for years to come.⁴

11 **Q: In the Master Plan, what planning years are shown for the proposed elevated**
12 **storage tanks?**

13 **A:** That is not clear, due to inconsistencies in dates that appear in different parts of the
14 Master Plan.⁵ Therefore, I recommend looking at current growth projections, instead of
15 relying on inconsistent dates in the 2002 Master Plan, several of which have already
16 passed.

⁴ Footnote 5 on Page 1 of Chapter 3 of the Master Plan prepared by Malcolm Pirnie indicates that because the three 2 MG ground storage tanks are considered as clear wells for the associated treatment plants, they could not be included in the network hydraulic analyses for assessing storage needs. However, contact with IDEM confirmed that, since the pump stations have emergency back-up power, the Ten States Standards support counting the 6 MG of ground storage in determining whether a storage deficiency exists.

⁵ The first 1.0 MG tank is shown as scheduled for 2005 in Tables 4.2 and 4.3 (Sheet ES-10). However, in the Section 7 Implementation Program, the first tank is scheduled to be finished by the end of 2004. The second proposed tank (0.75 MG) is scheduled for 2015 in Tables 4.2 and 4.4 (Sheet ES-10). However, the Section 7 Implementation Program shows the second tank scheduled to be finished by the end of 2008.

1 **Q: What are the current growth prospects for the areas to be served by the proposed**
2 **new tanks?**

3 A: Petitioner's responses to OUCC Data Request Questions 58 and 59 provide current
4 growth prospects for those two areas, projecting average daily usage of 3,112,500 gallons
5 for the NE tank and 3,637,500 gallons for the SE tank.

6 The data for the NE tank covers two proposed industrial developments and a residential
7 development, with a total combined average daily usage forecast of 1,350,000 gallons,
8 plus an additional estimate of 525,000 gallons for the existing unserved area, for a total
9 forecast of 1,875,000 gallons. If projected demand for an "extended affected area" is also
10 included, the average demand forecast could increase another 1,237,500 gallons, for a
11 grand total of 3,112,500 gallons.

12 Similar data for the SE tank shows a combined total projected average daily demand of
13 3,637,500 gallons for the proposed residential/commercial development, together with
14 the existing unserved area and the extended affected area. When I toured the SE area, I
15 did not find any new construction for either residential or industrial developments. There
16 were several cornfields and a number of existing homes not connected to the water
17 system.

18 **Q: What are your conclusions regarding the plan to construct both the NE and SE**
19 **elevated storage tanks during the four-year capital improvement program being**
20 **funded in this rate case?**

21 A: I initially questioned whether Elkhart needs to add both of the proposed new elevated
22 storage tanks during the next four years. However, Elkhart's responses to OUCC Data
23 Request Questions 58 and 59 show a growth estimate of 6,750,000 gallons in average

1 daily demand, with a peak daily demand of 14,850,000 gallons, assuming the growth
2 areas develop as Elkhart projected. Based on those figures, I no longer question the need
3 to add both the NE and SE elevated storage tanks during the next four years. Given
4 projected growth, those additions are needed to meet demand, boost pressure, and satisfy
5 fire protection requirements.⁶

6 However, I would urge the utility to include its 6 MG of ground storage in any future
7 projected system adequacy studies, since that ground storage is supported by high service
8 pumping provisioned with back-up generators capable of meeting emergency need
9 requirements.

10 **F. RECOMMENDED APPROVAL OF CAPITAL IMPROVEMENT PROJECTS**

11 In conclusion, Petitioner's planned capital improvement program appears reasonable and
12 necessary, based on current and projected system needs. The projected \$13,261,075 total
13 cost of Petitioner's capital improvement program appears reasonable, as does the
14 projected schedule for undertaking and completing individual capital improvement
15 projects. I therefore recommend that the IURC approve Petitioner's planned capital
16 improvement projects as furthering the public interest in equipping the Petitioner to
17 continue to provide safe and reliable water utility service to the public at reasonable rates.

⁶ If the growth projections are not met, the utility may encounter loss of chlorine residual due to low turnover. Under those circumstances, it would need to conduct periodic testing at customer service locations served by the two new towers to detect any chlorine-related problems.

1 V. OPERATING RECOMMENDATIONS

2 A. Valve Turning Program

3 **Q: Did you have any operating recommendations for Elkhart?**

4 **A:** Yes. The water utility should increase its valve turning maintenance efforts. Elkhart has
5 approximately 3,250 valves in its system (including 12 left-handed valves). It has three
6 (3) power-operated valve-turning devices. Despite the availability of that equipment,
7 Elkhart only turned approximately 400 valves during the test year. (See Petitioner's
8 Response to OUCC Data Request Question No. 18.) Elkhart's left-handed valves are
9 marked on plant drawings, but are not marked in the field. (See Elkhart's Response to
10 OUCC Data Request Question No. 62.) The left-handed valves need to be marked in the
11 field, to prevent workers from inadvertently turning them the wrong way, causing breaks
12 and water leakage.

13 Most water utilities turn most of their valves at least once a year, with the remainder on a
14 two-year cycle. The purpose of a valve-turning program is to ensure that valves will
15 operate during normal maintenance and during emergency service restoration activities,
16 when instant valve operability is critical. Under Elkhart's current operating protocol, the
17 valves in Elkhart's water utility system might only be turned once every eight (8) years.
18 The OUCC recommended and the City of Elkhart agreed to modify its valve-turning
19 program to cover at least 25% of its valves each year, so that all valves are turned at least
20 every four years. The OUCC believes that is a reasonable first step toward bringing
21 Elkhart's valve turning program into compliance with industry practice. That effort will

1 require some dedicated manpower, equipment and other utility resources. Therefore, the
2 OUCC agreed to allow Petitioner to recover certain additional valve-turning program
3 expenses in this rate case, which the OUCC agrees are reasonable and necessary, as more
4 fully discussed in the OUCC's accounting testimony.

5 **B. Well Cleaning**

6 **Q: Do you have any recommendations regarding Elkhart's current well cleaning**
7 **practices?**

8 A: Elkhart uses a 4- to 5-year well cleaning cycle that appears to be reasonable and
9 necessary. Elkhart has primarily used the same contractor for all well cleanings, at a cost
10 of approximately \$8,500 per well for routine cleaning. If more significant work is
11 required (such as a screen replacement) the cost has run closer to \$12,000 per well.
12 Elkhart plans to open its well cleaning work to competitive bidding in the future, which
13 could help reduce future maintenance costs associated with its 29 wells.

14 **C. Tank Painting**

15 **Q: Please describe Elkhart's current practices regarding tank painting.**

16 A: Elkhart has a plan in place to regularly inspect and paint its storage tanks with suitable
17 coatings that last 15 years or more. I inspected the exterior of two of Elkhart's four
18 elevated tanks. The Riverview tank, constructed in 1986, was last painted in 2003 and is
19 in excellent condition. The South Well Field ("SWF") tank is older. Its exterior was last
20 painted in 1987, using an aluminum alkyd coating. (See Elkhart's Responses to OUCC
21 Data Request Questions 63-65.) The SWF tank, though not as attractive as the Riverview
22 tank, does not show any signs of flaking or rust. An epoxy paint was applied to the

1 interior of that tank in 1990. It was last inspected by Dixon Engineering in 2004 and is
2 scheduled for another inspection in 2009. The interior of the SWF tank was rated in good
3 condition, and the cathodic protection system was operating properly.⁷ The exterior was
4 rated in fair condition with a recommendation to recoat with a polyurethane system after
5 full preparation. Although a polyurethane coating is more expensive, it has a longer life
6 expectancy (possibly as long as 30 years). The exterior painting recommended in 2004
7 has not been done and does not appear to be scheduled at this time. (Elkhart may be
8 attempting to delay exterior painting on the SWF tank until the interior also needs work,
9 so both surfaces can be done as a single project.)

10 **Q: Did the OUCC reach an agreement with Elkhart on the appropriate length of time**
11 **over which to recover tank painting expenses?**

12 **A:** Yes. The Settlement calls for Elkhart to use at least a 15-year amortization period to
13 recover tank painting expenses during the life of the proposed rates – unless or until the
14 IURC orders otherwise in a future rate case. The OUCC believes that the 15-year
15 amortization period is fair and reasonable and should be approved.

16 **D. Pump Motor Maintenance**

17 **Q: What impact do soft-start systems have on pump motor performance?**

18 **A:** Soft-start is electrical circuitry that permits an electric motor to gradually ramp up to full
19 speed under load after a few seconds. When applied to high service pump motors, this
20 prevents a high service pump from initiating a pulse of high water pressure in the

⁷ Some utilities use active cathodic protection systems to retard corrosion and extend the life of interior coatings in water storage tanks.

1 distribution system that could cause breakage, failure or wear of some of the components.
2 Soft-start circuitry can play a cost-effective role in lengthening the operating life of
3 larger, more expensive pump motors (e.g., 100 to 300 horsepower). Elkhart has already
4 applied this technology to several of its high service pump motors and is planning to
5 convert more.

6 **VI. OUCC RECOMMENDATIONS REGARDING CONSERVATION**

7 **Q: What is Elkhart's current unaccounted-for water rate?**

8 A: Operating information in Elkhart's 2005 Annual Utility Report to the IURC shows a lost
9 water rate of approximately 11%. Typically a lost water rate of 15% or less is acceptable.
10 Although there does not appear to be a current problem with Elkhart's lost water rate, as
11 part of the underlying Settlement, Elkhart Water Utility's management agreed to continue
12 to check unaccounted-for water rates at least annually and to take corrective action, if and
13 when warranted.

14 **Q: Was water conservation discussed in the Malcolm Pirnie Report?**

15 A: Yes. However, the report did not contain an approved action plan, nor was any
16 mentioned in Elkhart's testimony. (See Elkhart's Response to OUCC Data Request
17 Question No. 57.) In Section 4 of the Master Plan, fourteen alternatives were identified
18 as measures to help close projected deficits in water supply. Once identified, each
19 alternative was prioritized using a composite matrix analysis procedure. Of the
20 alternatives considered, the following four were selected for further consideration:

- 21 1. Add capacity to the Northwest well field.

1 2. Water conservation.

2 3. Re-drill and rehabilitate wells at North Main Street.

3 4. Add capacity to the South well field.

4 Conservation was ranked high on the list of alternatives considered, suggesting a
5 willingness on the part of the City of Elkhart to adopt a water conservation program to
6 help control future water demand. Current water conservation efforts have focused on
7 public education programs. Conservation has important benefits because it can delay the
8 timing of infrastructure changes and additions, defer associated financing requirements
9 and help keep water utility rates down. To some extent, the City of Elkhart has relied on
10 the water conservation activities and programs of the Elkhart EnviroCorps (which is
11 funded, at least in part, with federal grant money).

12 **Q: Please explain what the Elkhart EnviroCorps is and what it does.**

13 **A:** The Elkhart EnviroCorps is associated with the AmeriCorps national volunteer program.
14 It is staffed mainly by young people interested in environmental issues who receive a
15 basic living allowance and educational benefits for their service. Elkhart EnviroCorps'
16 stated mission is to expand opportunity by training and empowering members to address
17 critical environmental and human needs of the City of Elkhart, to take actions to support
18 the community, to instill community service and educate the public on environmental
19 matters, and to provide a forum for diverse people to learn to work together for the
20 common good. The Elkhart EnviroCorps supports a program sponsored by The
21 Groundwater Foundation called "Groundwater Guardian."

1 EnviroCorps has developed a Water Conservation Program in which Elkhart homeowners
2 are provided with water conservation devices. Since 2003, 305 of these devices have
3 been installed in 80 homes. (See Elkhart's Response to OUCC Data Request Question
4 No. 55.) Examples include water-saving showerheads and toilet tank water displacement
5 bags. EnviroCorps' in-school programs on water quality and conservation are among the
6 strongest efforts to teach Elkhart residents about water conservation. With the aid of a
7 mascot ("Kerplop the Water Drop"), Elkhart EnviroCorps presents lessons about water
8 conservation to students throughout the Elkhart Community Schools. Since 2002
9 approximately 1,680 students have attended this training. Kerplop also makes
10 appearances at various community events and festivals to spread the word about water
11 conservation and keeping water clean. The City of Elkhart also makes water
12 conservation brochures available to the public in municipal buildings, including the
13 utility office.

14 **Q: What, if any, other water conservation plans has the City of Elkhart considered**
15 **adopting?**

16 **A:** In its Responses to OUCC Data Request Questions Nos. 56 and 57, Elkhart confirmed
17 that it has not adopted or developed any other formal plans to further promote water
18 conservation by its water customers. Since its unaccounted-for water rate has been low
19 (around 11%) and since the EnviroCorps' educational program is strong, the Petitioner
20 did not see a need to adopt additional conservation measures -- other than the emergency
21 plans it has in place to curtail water usage related to short-term main breaks or summer
22 droughts.

1 However, an aggressive water conservation plan can help gradually lower water demand,
2 or at least limit its future growth. Reducing, or at least controlling, future demand can
3 help extend the lives of well fields and other sources of raw water and help delay
4 treatment plant expansions, distribution plant upsizing, and the construction of additional,
5 larger water storage tanks. The goal is not to eliminate all future growth, since the
6 number of customers may increase with population growth and other community or
7 business needs may change. Therefore, water conservation programs can have several
8 dimensions, including efforts to:

- 9 1. Minimize water leakage within a utility's water system.
- 10 2. Encourage customers to use water resources more efficiently.
- 11 3. Motivate customers to purchase less water – typically through rate
12 block structures that discourage higher volume purchases.

13 **Q: Do you have any recommendations concerning the type of water conservation**
14 **efforts the City of Elkhart should undertake?**

15 **A:** The OUCC recommended, and Elkhart agreed in this Settlement, to form a Water
16 Conservation Committee. Elkhart should submit a five-year water conservation plan to
17 the IURC within a year of the Commission's final order in this Cause, and serve a copy
18 of the plan on the Director of the OUCC Water/Wastewater Division. The Water
19 Conservation Committee should consider:

- 20 1. Having pressure-reducing valves installed near the utility's in-
21 home water meters in selected high-pressure service areas.

1 2. Having check valves installed near the in-home meters for all
2 Elkhart customer locations (this may require a long-term
3 implementation schedule).⁸

4 3. Reviewing the feasibility of future water treatment plant
5 modifications (e.g., backwash recycling to reduce the need for
6 additional raw water).

7 4. Working with the local EnviroCorps program to fill any apparent
8 gaps in water conservation related education for customers (e.g.,
9 providing handouts on water wheels).⁹

10 5. Considering possible future modifications to the utility's rate
11 design (e.g., reducing or restricting high volume discounts).

12 The OUCC believes those agreed conservation recommendations are fair and reasonable
13 and should be approved to further the Public Interest.

14 VII. FINAL COMMENTS AND RECOMMENDATIONS

15 Q: What are your final recommendations for the IURC in this case?

16 A: The OUCC recommends the follow actions, all of which were agreed upon by the
17 Petitioner in Settlement:

18 1. The list of projects included in Petitioner's Capital Improvement
19 Plan (Exhibit EH-2) should be approved.

20 2. Petitioner should be required to modify its valve-turning program
21 so that every valve in its system is turned at least once every four
22 years.

⁸ Check valves help prevent water loss from a residence following main breakage or other failure in the water utility system. Check valves also help prevent damage to customer water heaters.

⁹ One such product is available from Niagara Conservation (www.niagaraconservation.com).

1 3. Elkhart's management should be required to continue monitoring
2 the utility's unaccounted-for water rate and take action to reduce
3 lost water if the loss rate exceeds 15%.

4 4. If it has not already done so, Petitioner should be required to form
5 a Water Conservation Committee to identify and develop
6 reasonable water conservation options.

7 5. The Petitioner should be required to submit a five-year plan for
8 water conservation to the Commission, with a copy to the OUCC,
9 within one year of the IURC entering a final order in this case.

10 **Q: Does this conclude your testimony?**

11 **A: Yes, it does.**

1. The first part of the document is a letter from the President of the United States to the Congress, dated January 3, 1862. It is a very important document, as it contains the President's annual message to Congress. The letter is written in a very formal and dignified style, and it is one of the most important documents in the history of the United States.

2. The second part of the document is a letter from the Secretary of the Treasury to the Congress, dated January 3, 1862. It is a very important document, as it contains the Secretary's report on the state of the Treasury. The letter is written in a very formal and dignified style, and it is one of the most important documents in the history of the United States.

3. The third part of the document is a letter from the Secretary of the Interior to the Congress, dated January 3, 1862. It is a very important document, as it contains the Secretary's report on the state of the Interior. The letter is written in a very formal and dignified style, and it is one of the most important documents in the history of the United States.

4. The fourth part of the document is a letter from the Secretary of the War to the Congress, dated January 3, 1862. It is a very important document, as it contains the Secretary's report on the state of the War. The letter is written in a very formal and dignified style, and it is one of the most important documents in the history of the United States.

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March 1, 2007

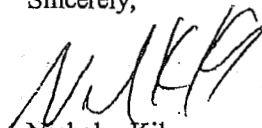
Daniel LeVay
Office of Utility Consumer Counselor
Room N501
Indiana State Office Building North

Re: Indiana Office Of Utility Consumer Counselor Data Request, Elkhart Municipal
Water
Cause No. 43191
OUCC Data Request Set No. 1

Dear Mr. Daniel LeVay:

Enclosed please find a copy of the City of Elkhart's Response to Indiana Office of Utility
Consumer Counselor's First Set Of Data Requests.

Sincerely,



Nicholas Kile

Enclosure

INDS01 NKK 926698v1

completion of this larger project and the routes affected, as well as the expenditures for this work contained in this capital improvement program and an estimate of those expenditures to be spent beyond this program.

Response: A- This is one phase of a larger project to complete the 24" pressure loop that runs through Elkhart. The remaining phases include: Rainbow Bend & Dorsey, SR 19 (Lusher to West Franklin) and Pennsylvania & Okema. The portion of this project from Franklin to Pennsylvania has already been completed. This multi-phased project drastically improves the efficiency in the conveyance of water throughout the service area and when connected with increased water supply, will acceptably mitigate the pressure and flow deficiencies in the system.
B- Total costs for these projects will not be determined until the design of the projects is underway. Anticipated expenditures for each are identified in Mr. Horvath's testimony and exhibits.

Q-15 Provide the test year count of customer complaints the utility received and categorize by type of complaint (low pressure, billing, etc.). Does the utility maintain a complaint log? If so, provide a copy of the form if one is used.

Response: The Utility experienced 19 complaints during the test year. Complaints are entered in to a database by the Operator who received the call and may be queried on any field in the database. The form and a report of complaints from the test year are attached.

Q-16 Describe the utility's meter replacement program including the timing of replacements and the annual expenditures. What is the technology of meters the utility is currently using for replacements. If more than one technology of meters exists in service, provide a count of each type.

Response: A- The Utility does have a meter replacement program at an average annual cost of \$85,000. The average meter life is estimated at 20 years.
B- Meter technology is estimated as:
97%- brass nutating disc
1%- plastic nutating disc
2%- other including compound and sonic flow

Q-17 Approximately how many valves are in the utility's water system? How many valves are left-handed and are they marked as such (in the field and/or on drawings)?

Response: A- There are approximately 3,250 main line valves.
B- Of these, 12 or less than 1% are left handed. They are indicated as left handed valves in the record drawings but not in the field.

Q-18 Does the utility have a valve turning program? If so, what portion of the valves is turned at what intervals? Does the utility have a power-operated valve turning tool?

Response: A- Yes. During the test year the City exercised approximately 400 valves. The City is in the process of revision of the valve turning program at this time.
B- The City has two hand-held pneumatic valve turners and one truck mounted hydraulic PTO valve turner.

Q-19 Identify the pressure zones this utility has in its system, describe the general location of each, and provide the pressure target or equivalent elevation for each. Identify any pressure zones being created by this capital improvement program.

Response: Elkhart has two pressure zones for normal flow conditions. The main Pressure Zone had approximately 1,742,000 feet of water mains varying from 6" to 36" in diameter. The second is the South Pressure Zone, which has approximately 14,000 feet of water mains varying from 8" to 14" in diameter. The South Pressure Zone was created to service the southern area of the system that has an elevation between 30 and 50 feet higher than the rest of the system.
Elkhart has three pressure zones for extreme fire conditions. The Main Pressure Zone has approximately 1,138,000 feet of water mains varying from 8" to 14" in diameter. The third is the West Fire Booster Zone, which has approximately 104,000 feet of water mains varying from 8" to 16". This zone is part of the Main Pressure Zone for all consumption demands except fire flows. When more than three hydrants are needed the West Fire Booster Station automatically activates. No additional pressure zones are planned at this time.

Q-20 Relative to the \$172,650 figure for the design of each of the proposed elevated storage tanks, does this figure cover the cost of soil samples and analysis? If so, what is the approximate cost for this function for each of the tanks? If not, where is this cost included in the utility's capital improvement program?

Response: The preliminary estimate includes soil sampling and analysis for tank placement. However, we have not selected services for this work to confirm this price will fall within our budgeted amount.

Q-21 For each of the proposed new storage tanks in this capital improvement plan, provide the maximum and minimum detention times.

Response: This will be determined during engineering design of each tank.

Q-22 Regarding the proposed Southeast Elevated Storage Tank, please respond to the following:

- a. What treatment plants and wellfields will supply water to this tank?
- b. Provide the estimated average daily water flow rates for each treatment plant and wellfield that will supply water to this tank.

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April 13, 2007

Karol H. Krohn, Esq.
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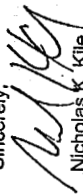
RE: City of Elkhart, Indiana (Cause No. 43191)

Dear Karol:

Please find enclosed a copy of the City of Elkhart's Responses to OUCC Data Request Set No. 3.

Should you have any questions, please do not hesitate to contact me.

Sincerely,



Nicholas K. Kille

NKK/mw
Enclosures

VIA EMAIL & U.S. MAIL

IND001 NKK 93402v1

Chicago Elkhart Fort Wayne Grand Rapids Indianapolis South Bend Washington, D.C.

A-53 Please refer to appendix D of Petitioner's exhibit EH-2 filed on February 7, 2007. Please see attached exhibit G, which is a copy of appendix D.

Q-54 In its response to OUCC Data Request Set No. 2, Question 35, the Petitioner refers to the allocation of the premiums for property and general liability insurance within the municipality. Please provide a worksheet detailing this calculation between the individual component units of the city. This worksheet should include the value of the assets insured for each unit.

A-54 Please see attached exhibit H.

Q-55 Please identify and describe any water conservation accomplishments or efforts undertaken by the water utility during the last 5 years, including any customer education efforts. Please also list any improvements in facilities that may have contributed to more efficient use of water during that period.

A-55 Since 1995, Elkhart has been a Groundwater Guardian Community. Elkhart's efforts have been driven by several "Results Oriented Activities," which are planned and implemented activities designed to protect, conserve, and educate the public about groundwater. The Elkhart EnviroCorps heads this effort along with the Elkhart Environmental Center.

Driven to promote groundwater conservation EnviroCorps has developed a *Water Conservation Program*, providing Elkhart homeowners with water conservation devices. Since 2003, 305 water conservation devices have been installed in 80 homes.

Among the strongest efforts to educate the public about water conservation are EnviroCorps' in-school programs that focus on water quality and conservation. With the aid of their mascot Kerplop the Water Drop, EnviroCorps presents lessons about water conservation to students throughout the Elkhart Community Schools. Since 2002 approximately 1,680 students have benefited from the lessons of Kerplop and her friends. Kerplop also makes appearances at various community events and festivals to spread the word about water conservation and keeping water clean.

Petitioner also provides brochures in its office and municipal buildings on water conservation.

A Water Use Audit conducted in September of 1999 by Pitometer Associates indicated 3.0% water loss, which is well below industry standards. The primary facility recommendation as a result of this study was to increase the efficiency of the flow meter at the Northwest Wellfield which has been satisfied.

Q-56 Please provide copies of any current water conservation plans already developed or adopted by the water utility.

A-56 Currently Petitioner does not have a formal conservation plan in place. When the need for conservation arises Petitioner requests voluntary restrictions from its customers. Attached exhibits I & J are two press releases Petitioner issued in the past.

Q-57 Please describe any water conservation goals the utility has planned for the next five years. Even if no plans have been developed or adopted by the Petitioner at this time, please describe what efforts the utility could undertake to encourage and achieve better water conservation during the next five years.

A-57 At present, Petitioner does not have any formal plans developed or adopted to further promote water conservation. Currently, Petitioner's line loss percentage is below industry standards. In addition, Petitioner recognizes the need to preserve this natural resource. Petitioner expects to continue to support the efforts of Elkhart EnviroCorps. If other economical opportunities to promote conservation arise, Petitioner will consider those options.

Q-58 Please provide the following information regarding the proposed new Northeast Elevated Storage Tank:

- a. List the proposed housing, commercial, and/or industrial developments that could create significant demand for this water storage facility. Please also provide estimates of the increased water usage associated with that additional demand.
- b. Provide data on any modeling and any other calculations performed that justify the need for this water storage facility (e.g., demand, pressure, fire requirements, etc.).
- c. Describe any other alternatives the utility may have examined to meet projected future needs in the Northeast Area (e.g., expanded pumping or other alternatives considered, aside from the proposed water storage tank).
- d. Could the continuation and/or completion of looping activity for the 24" main replace the need for this elevated tank? Would your answer be the same if the "Ten States Standards" are not followed? Please explain your response.
- e. Describe any impairment the utility or its customers would experience if the proposed project is deferred beyond 2010.

A-58

- a. See table 58-1
- b. The "Master Plan for Water Supply & Distribution 2001-2015" (MP) was provided as part of Elkhart's first submission. The Executive Summary references the water system model and its use as a tool to assist in determining Elkhart's needs. Chapters 5 and 6 are a more in depth discussion of the model, its creation and implementation.
- c. Several alternatives were proposed in the Master Plan. Storage in a water system is used to address three main issues:
 1. Flow Equalization is needed to reconcile the difference between the max day average pumping rates and the peak consumption rates. Elevated storage was allocated to address this need while also helping to maintain pressure in the system.
 2. Fire Protection Capacity is often handled with elevated storage. Elkhart has not allocated elevated storage for the future Fire Protection needs, because fire flow capacity can be more cost effectively built into additional supply at the well fields.
 3. Emergency or Contingency Reserve was allocated to elevated storage.
- d. No, while the continuation of the large diameter water main loop will assist in transporting flow and equalize pressures it will not alleviate the flow equalization demands as described above. The answer would not change even if the Ten State Standards were not followed.
- e. The elevated storage is needed to reconcile the difference between the utility's ability to produce water and maintain pressure during peak usage hours and our customers demands during those times. The Master Plan showed that the utility already has a Flow Equalization issue during maximum usage days. Failure to address this need will result in use restrictions for the customers. In extreme dry weather periods this deficiency could start to also affect Fire Protection Capacity.

Table 58-1

Name	Type of Use	Area (Acres)	Anticipated average Day Consumption Rate (Gallon/acre)	Daily Use (Gallons)	Max day Factor	Max Day Demand	Fire Flow Rate (gpm)	Fire Flow duration (Hours)	Fire flow Volume
Northeast Tank Immediate Affected Area									
Elkhart East	Industrial Commercial	1,090	1,000	1,090,000	2.2	2,398,000	5,000	5	1,500,000
Remington Park	Industrial Commercial	110	1,000	110,000	2.2	242,000	5,000	5	1,500,000
Timberstone and adjoining areas	Residential	100	1,500	150,000	2.2	330,000	1,000	2	120,000
Unreserved areas	Residential	350	1,500	525,000	2.2	1,155,000	1,000	2	120,000

Northeast Tank Extended Affected Area									
Beck Industrial Park II	Industrial	200	1,000	200,000	2.2	440,000	5,000	5	1,500,000
Beck Industrial Park III	Industrial	300	1,000	300,000	2.2	660,000	5,000	5	1,500,000
Welter property	Residential commercial	590	1,250	737,500	2.2	1,622,500	1,000	2	120,000

Q-59

Please provide the following information regarding the proposed new Southeast Elevated Storage Tank:

- List the proposed housing, commercial, and/or industrial developments that could create significant demand for this water storage facility. Please also provide estimates of the increased water usage associated with that additional demand.
- Provide data on any modeling and any other calculations performed that justify the need for this water storage facility (e.g., demand, pressure, fire requirements, etc.).
- Describe any other alternatives the utility may have examined to meet projected future needs in the Southeast Area (e.g., expanding pumping or other alternatives considered, aside from the proposed water storage tank).
- Could the continuation and/or completion of looping activity for the 24" main replace the need for this elevated tank? Would your answer be the same if the "Ten States Standards" are not followed? Please explain your response.
- Describe any impairment the utility or its customers would experience if the proposed project is deferred beyond 2010.

A-59

- See table 59-1
- The "Master Plan for Water Supply & Distribution 2001-2015" (MP) was provided as part of Elkhart's first submission. The Executive Summary references the water system model and its use as a tool to assist in determining Elkhart's needs. Chapters 5 and 6 are a more in depth discussion of the model, its creation and implementation.
- Several alternatives were proposed in the Master Plan. Storage in a water system is used to address three main issues:

1. Flow Equalization is needed to reconcile the difference between the max day average pumping rates and the peak consumption rates. Elevated storage was allocated to address this need while also helping to maintain pressure in the system.
 2. Fire Protection Capacity is often handled with elevated storage. Elkhart has not allocated elevated storage for the future Fire Protection needs, because fire flow capacity can be more cost effectively built into additional supply at the well fields.
 3. Emergency or Contingency Reserve was allocated to elevated storage.
- d. No, while the continuation of the large diameter water main loop will assist in transporting flow and equalize pressures it will not alleviate the flow equalization demands as described above. The answer would not change even if the Ten State Standards were not followed.
- e. The elevated storage is needed to reconcile the difference between the utility's ability to produce water and maintain pressure during peak usage hours and our customers demands during those times. The Master Plan showed that the utility already has a Flow Equalization issue during maximum usage days. Failure to address this need will result in use restrictions for the customers. In extreme dry weather periods this deficiency could start to also affect Fire Protection Capacity.

Table 59-1

Name	Type of Use	Area (Acres)	Anticipated average Day Consumption Rate (Gallon/acre)	Daily Use (Gallons)	Max day Factor	Max Day Demand	Fire Flow Rate (gpm)	Fire Flow duration (Hours)	Fire flow Volume
Southeast Tank Affected Area									
Welter property	Residential commercial	590	1,250	737,500	2.2	1,622,500	1,000	2	120,000
Unserved areas	Residential	1600	1,500	2,400,000	2.2	5,280,000	1,000	2	120,000
Southeast Tank Extended Affected Area									
Beck Industrial Park II	Industrial	200	1,000	200,000	2.2	440,000	5,000	5	1,500,000
Beck Industrial Park III	Industrial	300	1,000	300,000	2.2	660,000	5,000	5	1,500,000

Q-60 Related to the proposed Northeast and Southeast Tanks, if the IURC were to approve only enough capital funds for one of these tanks to be constructed, which one would the utility choose to build and why?

A-60 Petitioner does not believe it can choose between one tank or the other. The Capital request matches Elkhart's MP which tries to prioritize all of the capital projects including storage. Both of these tanks are integral requirements if the utility is to alleviate the need for flow equalization, pressure, fire protection and provide emergency contingency to their respective areas of the system. By building only one of the proposed tanks Petitioner would deprive another area of the system of these needs. Elkhart is not prepared to deny the need for either of the proposed storage facilities.

Q-61 Without the proposed Southeast tank, would the utility be able to provide an adequate water supply for fire protection for Concord High School and Concord Middle School using the existing large main along Mishawaka Road? Why or why not?

A-61 The MP shows in that during 2005 max days Elkhart currently can marginally provide our modeled fire flow scenario. This prediction came to fruition in July and September 2005 with the requests for voluntary restrictions (see exhibits I & J). In the 2016 max day simulation the fire flow demands cannot be met. The elevated storage is one of multiple capital projects all of which work together to provide adequate supply of water for consumption and fire fighting.

Q-62 Regarding the 12 left-handed valves that the utility has in service in its distribution system, would it be possible for the utility to mark or label these in the field so that operating and maintenance forces would be aware of them? Why or why not?

A-62 The left hand valves could be denoted on the lids of their valve boxes by paint or decals. The challenge will be to maintain these markings as the valve boxes are generally in high traffic areas that see a lot of surface damage as part of normal traffic and snow plowing.

Q-63 The outer surface of the SWF elevated tank was last painted in 1987. Was an epoxy paint used at that time? If not, please describe the type of coating used and explain why it was used instead of epoxy paint. Would the utility expect the tank to be in a better condition today if an epoxy paint had been used?

A-63 The outer surface of the SWF elevated storage tank is an aluminum alkyd. This composite does not require traditional painting but periodically requires overcoating. The exterior condition of this tank was confirmed to be adequate in an inspection conducted in 2004 by Dixon Engineering. Dixon Engineering recommended that the next inspection of the tank be conducted in 2009.

Q-64 Was the interior of the SWF elevated tank also painted in 1987? If so, was an epoxy coating used? If not, please describe the type of coating used (e.g., cold wax or other) and explain why it was used instead of epoxy paint.

A-64 The interior was painted with an epoxy paint. The 2004 inspection report performed by Dixon Engineering confirmed the condition is sufficient. Dixon recommended that the next tank inspection should be conducted in 2009.

Q-65 What was the condition of the interior surface the SWF elevated tank when it was inspected in 2006? Please provide a copy of the 2006 tank inspection report.

A-65 The tank was last inspected in 2004. Attached exhibit K is a copy of the inspection report.

Q-66 Does the utility require customers to purchase line insurance to cover the cost of line breaks between the utility's main and the customer's meter?

A-66 No.

Q-67 For each of the funds maintained by the Water Department, please provide copies of the underlying ordinance(s) authorizing the creation and maintenance of those funds, together with any subsequent amendments thereto.

A-67 See Petitioner's response to data request #2 question #32.

Exhibit K

FIELD INSPECTION REPORT
LEGGED TANK

TANK OWNER: Elkhart, IN PROJECT NUMBER: 14-20-02-03
LOCATION: South Wellfield DATE of INSPECTION: 10/07/03
TYPE of TANK: Torosellipse HEIGHT to LWL: 95 ft.
CONSTRUCTION METHOD: Weld YEAR of ERECTION: 1966
TYPE of ROOF: Ellipse CAPACITY: 500,000 Gallons
TYPE of BOWL: Torus LETTERING: ELKHART (2x)
LOGO: No TYPE of INSPECTION: PSI

SITE CONDITIONS: Large grassy fenced area.

NEIGHBORHOOD: Pump station north; open fields east and south; nearest homes 200 ft. west;
apartment buildings 500 ft. north.

ACCESS: Paved drive.

POWER LINES: No

OTHER PROBLEMS: No

GENERAL INFORMATION ABOUT PREVIOUS PAINTING (if available)

	<u>WET INT.</u>	<u>EXTERIOR</u>
DATE:	1990	1990
PAINT SYSTEM:	Epoxy	Aluminum Alkyd

PART 1 - WET INTERIOR CONDITIONS:

1. Riser:
 - a. General condition of topcoat: Good Mils: 8-14
Inspection limited to visual observation of top and bottom sections.
2. Saucer/Diaphragm:
 - a. General condition of topcoat: Good Mils: 15-17
Cause of deterioration: None
Total estimated area of deteriorated coating: 0 sq. ft.
Average size of deteriorated areas: 0 sq. ft.
 - b. Condition of steel: Good
Starter pits: No
 - c. Estimate of pit welding: 0
 - d. Estimate of pit epoxy filling: 0

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FR-2

- c. Number of lineal inches of seam welding: 0
f. Number of lineal inches of seam sealing: 0
g. Number of lineal inches of weld grinding: 0
h. Number of construction lugs: 0
3. Bow: Mills: 14-16
a. General condition of topcoat: Good
Cause of deterioration: Pinholes on weld seams
Total estimated area of deteriorated coating: Less than 1 sq. ft.
Average size of deteriorated areas: Pinholes
Starter pits: No
Average pit depth: 2 in.
Deepest pit found: 1 in.
Estimate of pit welding: 0
Estimate of pit epoxy filling: 1
Number of lineal inches of seam welding: 0
Number of lineal inches of seam sealing: 0
Number of lineal inches of weld grinding: 0
Number of construction lugs: 0
Minor failures on key plate weld seams
4. Tank Shells:
a. General condition of topcoat: Good
Cause of deterioration: None
Total estimated area of deteriorated coating: 0 sq. ft.
Average size of deteriorated areas: 0 sq. ft.
Estimated area of deteriorated primer/previous coating: 0 sq. ft.
b. Condition of steel: Good
c. Starter pits: 0
d. Estimate of pit welding: 0
e. Estimate of pit epoxy filling: 0
f. Number of lineal inches of seam welding: 0
g. Number of lineal inches of seam sealing: 0
h. Number of lineal inches of weld grinding: 0
i. Number of construction lugs: 0
5. Roof: Mills: 13-15
a. General condition of topcoat: Good
Cause of deterioration: Weld seam pinholes on stiffener
Total estimated area of deteriorated coating: Less than 1 sq. ft.
Average size of deteriorated areas: Corrosion at roof stiffener

- b. Condition of steel: Good
Starter pits: 0
- c. Estimate of pit welding: 0
- d. Estimate of pit epoxy filling: 0
- e. Number of lineal inches of seam welding: 0
- f. Number of lineal inches of seam sealing: 0
- g. Number of lineal inches of weld grinding: 0
- h. Number of construction lugs: 0
6. Discussion of wet interior coating: Very good condition for its age.
7. Condition of steel:
Above HWL: Good Below HWL: Good
8. Number and location of stiffeners: 4 x 4 angle circumferential knuckle stiffener; 2 transverse roof diameter stiffeners.
9. Does this tank have a cathodic protection system: Yes
Condition: Good Type: Floating ring Manufacturer: Corrpro
10. The torus area was covered with approximately 2 in. of heavy sand sediment.

Any peculiar problems: Riser grate prevents entry to riser.

Recommendations: Reinspect in 5 years; install siphon pipe.

Results of adhesion tests, if recommended recoat: N/A

Were any paint samples taken for lead: Yes

PART 2 - DRY INTERIOR:

1. Dry Interior: N/A

PART 3 - EXTERIOR CONDITIONS:

1. Riser:
Diameter: 5 ft Number of sections: 11 1/4
- a. General condition of topcoat: Fair Mils: 8-11
Cause of deterioration: Rock nicks and minor spot delamination
Total estimated percent of deteriorated coating: 99%
- b. Estimated percent previous coating: 99%

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2. Columns:
Number: 6 Type: Tubular Diameter: 28 in.
Condition of connection to tank:
a. General condition of topcoat: Fair Mils: 4-10
Cause of deterioration: Cracking at thin coating areas
Total estimated percent intact: 98%
b. Estimated percent deteriorated previous coating: 98%
3. Struts: 1 set
Riser cylinder rods: Number and location: 1 set at struts
Rods under bowl: Yes
Riser tie bands: No
a. General condition of topcoat: Fair
Cause of deterioration: Delamination
Total estimated percent intact: 95%
b. Estimated percent deteriorated previous coating: 95%
4. Bowl:
a. General condition of topcoat: Poor
Cause of deterioration: Erosion to underlying green coat
Estimated percent intact: 90%
b. Estimated percent deteriorated previous coating: 90%
5. Sidewalls:
Number of shells: 3 Number of sections per shell: Mils: 12-16
a. General condition of topcoat: Good
Estimated percent intact: 99%
b. Estimated percent primer intact: 99%
6. Roof:
a. General condition of topcoat: Poor Mils: 8-12
Estimated percent intact: 99%
b. Estimated percent previous coating intact: 95%
Extensive spot failures; abrasion damage on south side from rigging cables.
7. Discussion of coating: Fair condition for its age.
8. Additional information:
Is there aluminum under topcoat: No
Results of adhesion tests: 1A roof 3A sidewalls and legs
Were paint samples taken for lead: Yes

How many: 3 Locations: Roof, legs, sidewalk

Any peculiar problems: No

Recommendations: Overcoat or abrasive blast clean.

PART 4 - FOUNDATION CONDITIONS:

1. Indications of differential foundation settlement: No
2. Indications of underground pipe leaks: No
3. Is soil eroded so foundation may be undermined: No
4. Are base plates, anchor bolts, or anchor bolt chairs deteriorated: Rust on some nuts
5. Are shrubs, trees, etc. encroaching the foundation: Minor
6. Is grout deteriorated: No
7. Is concrete spalled, cracked, or deteriorated: Minor weathering

PART 5 - CONDITION OF ACCESSORIES - EXTERIOR:

1. Sway rods: 2 bays
Condition: Good
Size deteriorated by corrosion: N/A
Smallest rod size: 1 1/4 in.
Are rods in adjustment: Yes
2. Balcony:
Does tank have external balcony: Yes Width: 29 in. Condition: Good
Percent coating remaining intact: 95% Height: 5 in. Condition: Good
Does balcony have a toe plate: Yes
Balcony railing height: 36 in. Is there a mid-rail: No - diagonal braces
Accumulation of rust, dirt, or bird droppings: Minor
Missing any bolts or rivets: No
Ladder entry to balcony severely restricted.
3. Overflow pipe:
Is overflow pipe in good condition: Yes Size: 8 in.
Screened: Yes - hinged flap valve
Discharges (to/af): Catch basin
Is there an air break: Yes Size: 12 in.
4. Exterior painter's rail: No, but 6 welded lugs at top of riser

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5. Any previous repairs evident: Balcony opening for ladder, riser hatch, and vent.
Priority repairs: None
Long term maintenance and general comments: Eliminate balcony ladder restriction.

PART 6 - CONDITION OF ACCESSORIES - INTERIOR:

1. Does the tank have a mud valve: No
2. Does tank have:
Inside balcony: No
Inside spider: No
Interior painter's rail: Yes Condition: Good 6 x 4 angle
Siphon: No
3. Fill pipe:
Size: 12 in.
Condition: Good
Deflector plate/silt ring: Deflector plate Condition: Good
Is the fill pipe insulated: No
Is there a separate draw line: No - 6 in. drain line in riser base

4. Expansion joint: No

PART 7 - CONDITION OF LADDERS (SAFETY):

1. a. Wet interior ladder: Condition: Good
DIMENSIONS: 1. Toe clearance: 7 in.
2. Width of rungs: 15 in.
3. Thickness of rungs: 7 in.
4. Shape of rungs: Round
5. Length of longest unsupported section: 35 ft.
6. Pitch: Vertical
- b. Dry interior ladder: N/A Condition: Good
c. Column ladder: Condition: Good
DIMENSIONS: 1. Toe clearance: 7 in.
2. Width of rungs: 15 in.
3. Thickness of rungs: 7 in.
4. Shape of rungs: Round
5. Length of longest unsupported section: 12 ft.
6. Pitch: Vertical
- d. Shell ladder: Condition: Good
DIMENSIONS: 1. Toe clearance: 7 in.
2. Width of rungs: 15 in.

3. Thickness of rungs: 1 in.
4. Shape of rungs: Round
5. Length of longest unsupported section: 8 ft.
6. Pitch: Vertical

Condition: Good

c. Roof ladder:

1. Transition from shell ladder: Continuous

2. Fixed or Revolving: Fixed

3. Hand rail: No

4. Fall prevention device: Yes - rail

Elevated/on Rungs: On rungs Condition: Good

- f. Any ladders caged: No

Where: Exterior ladders

- g. Any fall prevention devices: Yes

Design: Rail

PART 8 - HEALTH and SECURITY:

1. Access Ways:

Riser hatch: 36 x 24 Hinged: Yes

Shell hatch size: N/A

Access tube: N/A

Roof hatch size: 24 in. Hinged: Yes

Gasket leaking: No - cannot fully open

2. Vents: 1 Size: 18 in. Type: Aluminum frost-free

Is roof vent in good condition: Yes

Is there a vacuum vent: No

Is there a painter's ventilation hatch: No

3. Does tank have cathodic caps: Welded shut during last painting.

PART 9 - VALVE PIT CONDITIONS:

1. Is valve pit in good structural repair: Yes

Where are controls located: Pump station

Are controls heated: Yes Is tap heated: Yes

Does pit have an altitude valve: Yes

Valve is to be visually inspected only. Is it locked: No

Has owner complained about its operation: No

Is coating of piping and valves in good condition: Fair

Is there any steel loss: Minor scale

Percent of coating remaining intact: 95%

Is pit insulated: No

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PART 10 - AVIATION LIGHTS and ANTENNAS:

1. Aviation lights: 2 Opening: 1
2. Antennas: No
3. Priority repairs: Replace riser grate; eliminate balcony restriction; cut fill pipe to allow riser hatch to open.
Long-term maintenance and general comments: Continue cathodic protection; budget for exterior repaint; install roof railing and relocate aviation lights.

ENGINEERS: Ira M. Gabin, P.E.

TECHNICIANS: Larry Houck and Chris Kreiner

DATE: 10/07/04

The Field Inspection Report is prepared from the contractor's viewpoint. It contains most of the information the contractor needs to prepare his bid for any repairs or repainting. The Engineer uses it to prepare the engineering report. Cost estimates are more accurate if contractor problems can be anticipated. While prepared from the contractor's viewpoint, the only intended beneficiary is the owner. These reports are completed with diligence, but the accuracy is not guaranteed. The contractor is still advised to visit the site.

FIR-8

ELKHART, INDIANA

**500,000 GALLON TOROELLIPSE
(SOUTHVIEW TANK)**

PRELIMINARY STRUCTURAL INSPECTION

INSPECTION PERFORMED 10/07/04
REPORT PREPARED 11/01/04
REVIEWED by WILLIAM J. DIXON, P.E., ESQ. 12/01/04

CONCLUSIONS:

1. The wet interior coating is a multiple coat epoxy system that is in good condition, with good adhesion. There are a few areas of pinholing in the bowl. Above the high water line the coating is in good condition. There are minor coating failures along the roof circumferential stiffener angle.
2. The exterior coating is an aluminum alkyl system that is in fair condition. Primary modes of failure are delamination, cracking, and topcoat erosion. The coating has fair adhesion with extensive coating failures on the roof.
3. Four coating samples were taken and analyzed for metal content. Test results indicated the exterior coating is lead and chrome bearing, but the wet interior coating is neither lead nor chrome bearing.
4. The wet interior contains a ladder that is in good condition, but does not contain a fall prevention device.
5. The tank has an exterior leg column starts approximately 15 ft. above ground level, and extends up to the balcony. The ladder is in good condition, and contains a rail-type fall prevention device. Access through the balcony is severely restricted.
6. The tank's 36 in. x 24 in. manway located in the riser is in good condition, and the gasket showed no signs of leakage. The manway is hinged, but cannot fully open because it is restricted by the fill pipe deflector plate.
7. There is no siphon pipe in the wet interior to assist with draining the torus.
8. The roof vent is in good condition. It is a frost-free design. The pressure pallet was properly aligned during the inspection.
9. The tank's foundations are in good condition, with minor weathering, typical for its age.
10. The pit piping is in good condition. Most coating remains on the piping. Corrosion has started on the fittings, but major steel loss has not yet occurred.
11. The site surrounding the tank is large and is fenced. There is residential development to the west.
12. The wet interior contains a submerged, floating ring-type cathodic protection system that is in good condition.

RECOMMENDATIONS:

1. Abrasive blast clean the exterior to a commercial grade (SSPC-SP6) condition inside containment, and recoat with a polyurethane system. The estimated cost is \$160,000, plus \$60,000 for containment and compliance with lead abatement requirements.
2. As an alternate, high pressure water jet (5,000 – 10,000 psi), spot power tool clean with vacuum attachments, and recoat the exterior with an aluminum alkyd system. The estimated cost is \$90,000. Note: This option limits color selection to straight aluminum, light blue, or light green.
3. Reinspect the wet interior in five years. Recoating is not yet warranted.
4. Continue cathodic protection for wet interior surfaces, and schedule regular cleanings and inspections of the tank as recommended by AWWA (once every five years). Use a qualified cathodic protection contractor for maintenance.
5. Install a rail-type fall prevention device on the wet interior ladder. The estimated cost is \$2,000.
6. Remove the back side climbing restriction at the balcony by cutting out a railing section and enlarging the opening. The estimated cost is \$3,000.
7. Install fixed rungs on the transition cone. The estimated cost is \$1,000.
8. Abrasive blast clean the pit piping to a commercial grade condition, and apply a two coat epoxy polyamide system. The estimated cost is \$5,000.
9. Install a 3 in. diameter siphon pipe in the wet interior to aid with cleaning. The estimated cost is \$3,000.
10. Cut and lower the fill pipe height to eliminate restriction with the riser hatch. The estimated cost is \$1,000.
11. Replace the riser grate with a new hinged grate that allows unrestricted access to the riser. The estimated cost is \$3,000.

All money amounts are in 2004 dollars.

Emergency rescue from elevated tanks is something not practiced and may be more life threatening than the actual injury to the worker. Tanks were never designed with rescue considerations. We recommend that written procedures be stored at every tank and at the rescue personnel's office.

Previous improvements on the tank have addressed some emergency rescue concerns. Implementation of the recommendations regarding balcony restriction, riser grate

restriction, lowering through the riser, welding rungs in the transition cone, and wet interior ladder fall prevention device should enable safe retrieval procedures. Emergency rescue personnel can access the bowl from the roof and lower a rescue basket through the new hinged riser grate and out the riser manway which is large enough for the basket.

A roof railing is recommended to enclose the roof hatch and vent. Extend the sidewall ladder to a platform, and construct steps and a railing to the roof railing. The estimated cost is \$15,000.

When the railing is built, the aviation light conduit should be extended and the light attached to the rail to make changing bulbs safer.

INTRODUCTION:

On October 7, 2004, Dixon Engineering, Inc. (DIXON) performed a preliminary structural inspection on the 500,000 gallon Southview elevated water storage tank owned by the City of Elkhart, IN. Purposes of the inspection were to evaluate the existing coatings' performance and life; determine the structural integrity of steel surfaces and appurtenances; review safety and health aspects; and make budgetary recommendations for continued maintenance of the tank. Inspectors for DIXON were Ira M. Gabin, P.E.; with assistance from Larry Houck and Chris Kreiner, Staff Technicians. Scheduling and arrangements for the inspection were completed through Terry Bunn from the City. A source of water for cleaning was provided by the City. At completion of the inspection, HTH was supplied by DIXON in accordance with AWWA Standard C652 Disinfection Method No. 3.

The tank was built in 1966 with a height-to-low water line of 95 ft. It is welded construction. The tank was last painted in 1990. The baseplate was blasted smooth so the tank manufacturer could not be determined.

The site is accessible from a paved drive, and the tank is located approximately 500 ft. from the main access road. The site is fenced with a locking gate, and is adjacent to residential areas to the west, and open fields to the east and north. A pump station is located to the north. There is a large size staging area for contractors' equipment.

WET INTERIOR CONDITIONS:

The interior coating is a multiple coat epoxy system applied in 1990. It is in very good condition overall. On the roof the coating is 99% intact, with the primary areas of failure along the roof circumferential stiffener angle. Roof stiffener corrosion is typical, but should be corrected before structural loss of steel occurs.

The sidewall coating is virtually 100% intact, with no significant damage at the high water line, which would be the area most affected by ice pressures and ice movement. The coating on the bowl and torus area is in good condition, 99% intact. The only deterioration is pinholes at leg key plate weld seams.

The coating on the transition cone and upper riser is in good condition, virtually 100% intact. The riser grate hinges allowed less than 12 in. of clearance, which prevented entry into the riser. Visual inspection of the upper and lower riser sections did not indicate any failures.

Overall adhesion of the coating is good. Adhesion was tested by use of low pressure washing. This is a very crude form of adhesion testing; however, with really poor adhesion it would be possible to notice the coating fluctuate and layers of coating would be removed. With very poor adhesion, the existing coating might be removed.

The steel structure is in good condition below and above the high water line. Corrosion (steel loss) was observed in the bowl in the form of one - 7 in. deep pit. The exposed steel area is minimal with no significant steel loss. Other structural elements inside the tank include a 4 x 4 angle circumferential roof knuckle, and two transverse roof channel stiffeners. They are in good condition. The tank contains a 6 x 4 angle sidewall painter's rail that is also in good condition.

Tank surfaces below the high water line are protected by the submerged cathodic protection system that is suspended from the sidewalls, approximately 10 ft. above the floor area. The supporting ropes and anode wires are in good condition with no anode breaks noted. The pressure fitting exiting the riser showed no signs of leaking. The reference anode is intact and in good condition.

The torus area was covered with approximately 2 in. of mud sediment that was flushed from the interior. The torus area was filled with water because the torus does not have a siphon pipe.

WET INTERIOR RECOMMENDATIONS:

Continue regular maintenance inspections at least every five years. Repainting is not yet warranted.

During the next major maintenance project, install a 3 in. siphon pipe to assist with draining the torus area for inspection. The estimated cost is \$3,000.

Continue operation of the submerged cathodic protection system, and complete an additional inspection in five years as recommended by AWWA to quantify any further pitting. Technically, all pitting should be corrected to quantify the effectiveness of the cathodic protection system.

EXTERIOR CONDITIONS:

The exterior coating is a multiple coat aluminum alkyd system applied in 1990. There are numerous minor coating breaks, with small amounts of surface rust and rust staining on the legs and riser. The coating is cracked at thin areas on the legs. Surfaces have faded due to exposure to ultraviolet rays, which is a normal occurrence for an exposed coating system.

The roof topcoat is degraded, with numerous spot failures. There also are abrasion failures on the south side of the roof that may have been caused by sloppy removal of rigging cables after the last painting. The bowl coating is in fair-to-poor condition. Primary cause of failure is topcoat erosion, exposing the underlying green coating. The lower bowl area is rusting along the vertical weld seams and at random spots.

ASTM adhesion tests were performed on the sidewalls, legs, riser, and roof. Test results indicated a 1A result (equivalent to 65% loss of adhesion on the roof); and 3A on the legs

and riser (equivalent to 15% loss of adhesion). Loss of adhesion is to the substrate. Adhesion will be a major factor in deciding the recommended method for repair.

The existing coating is an average of 4 - 10 mils thick on the legs; 8 - 11 mils thick on the riser; 12 - 16 mils thick on the sidewalls; and 8 - 12 mils thick on the roof.

Three exterior paint samples were tested for lead. The riser sample contained 4.1% lead by weight; roof sample 4.7% lead by weight; leg sample 7.5% lead by weight. The leg sample also indicated the presence of chrome at 0.88% by weight.

Lettering on the tank consists of "ELKHART" in two locations. Lettering is block style.

EXTERIOR RECOMMENDATIONS:

Remove the existing coating by abrasive blast cleaning to a commercial grade (SSPC-SP6) condition, and apply a four coat acrylic polyurethane system. The existing coating's adhesion is marginal for application of another coat. Polyurethane coatings have excellent high gloss finishes, and they tend to maintain a glossy finish longer than conventional alkyds. The coatings have a minimum temperature requirement for application and must be applied during warm weather. They also are sensitive to moisture during the curing process. If moisture is present during cure, the appearance will become cloudy with little or no gloss. The estimated cost for the four coat urethane system is \$220,000, including containment and lead removal concerns.

As an alternate, repaint the exterior by recoating over the existing system. Surface preparation would involve high pressure water cleaning at 5,000 - 10,000 psi, and spot power tool cleaning all rusted and abraded surfaces. After surface preparation has been completed, paint with a spot three coat aluminum alkyd system. The first coat is a spot primer; the second and finish coats cover the entire surface. The estimated cost is \$90,000. Because this is an aluminum alkyd system, it must be recoated with a compatible aluminum alkyd system. This limits color selection to three aluminum shades, and would not allow the City to match the colors of other recently repainted tanks. Coating life will be less than with the full removal option. Expect eight-to-ten years before the appearance is similar to current conditions.

STRUCTURAL:

Foundations:

The foundations are in good condition. Very minor weathering has occurred.

There is minor weed encroachment on the foundation.

Some of the anchor bolt nuts are corroded.

Rods:

The tank's sway rods are in good condition with minor spots of coating failure and surface rust on the rods and turnbuckles, and also on the struts between the leg columns.

The riser tie rods are in good condition.

The riser tie rods extend from the leg columns to the riser with fixed lug connections.

There are tie rods under the bowl, and fixed lugs at the top of the riser for use by contractors.

Balcony:

Disclaimer: Unless we feel that ladders or balconies are unsafe, it is our opinion that if they were built to code at the time of construction, they do not require replacement. In Michigan and Indiana we have found OSHA tied to the BOCA Code, which requires upgrades only with significant work on the structure. ("Significant work" is another gray area.) The code changes three times in the late 1980's and early 1990's and it seems ridiculous to redo each time. Unfortunately it is our responsibility to inform you of this possible deficiency.

The balcony is a structural element on the tank. It is in good condition.

The balcony is 29 in. wide, with a 36 in. high safety rail and a 5 in. kick plate. There is no mid-rail, but there are diagonal braces. Current requirements are 30 in. wide with a 42 in. high safety rail.

Legs:

The tank is supported by six - 28 in. diameter tubular leg columns that attach to the sidewalls and bowl at balcony level. The legs are in good condition and appeared in alignment.

SAFETY:

Ladders:

There is a wet interior ladder from the roof manway down to the bowl along the sidewall. The ladder is in good condition, but does not contain a fall prevention device. Several upper rungs have corrosion and minor steel loss.

The transition cone does not have a ladder, making access to the riser difficult.

The tank's roof, shell, and leg ladders contain rail-type fall prevention devices that are in good condition. The ladders do not meet OSHA requirements;

however, because they contain fall prevention devices, they grandfather under current requirements.

A jagged opening in the balcony provides severely restricted access from the column ladder to the balcony.

Install a rail-type fall prevention device on the wet interior ladder. The estimated cost is \$2,000.

Remove the back side climbing restriction at the balcony by cutting out a railing section and enlarging the opening. The estimated cost is \$3,000.

Install fixed rungs in the transition cone. The estimated cost is \$1,000.

HEALTH and SECURITY:

Access Ways:

There is a 24 in. diameter hinged, rainproof roof access manway to the wet interior that is in good condition. The manway has a rainproof cover consisting of a 4 in. curb, and a 2 in. lip on the cover.

There is a 36 in. x 24 in. manway at the bottom of the 5 ft. diameter riser. The manway is gasketed and in good condition. The hatch is hinged, but can only partially open because the fill pipe deflector plate interferes.

Roof Vents/Screens:

The tank has an 18 in. diameter frost-free aluminum roof vent that is in good condition. The vacuum pallet is properly aligned.

Overflow Pipe:

The tank has an 8 in. overflow pipe that exits the roof knuckle area, extends through the balcony, and down along a leg column to ground level. The discharge end of the pipe has a screened flap valve that is in good condition. Discharge is 12 in. above the ground, creating the preferred air gap.

PIT/PIPING:

There is a valve pit adjacent to the tank that is in good condition.

The piping and valves have general surface rust, but appeared in good condition.

The pit contains an altitude valve that appeared in good condition.

Abrasive blast clean the pit piping to a commercial condition, and apply two coats of epoxy. The estimated cost is \$5,000.

FILL PIPE:

The 12 in. fill pipe extends approximately 3 ft. into the bottom of the riser. The pipe has a deflector plate over the top that interferes with full opening of the riser manway.

- 7 Cut and lower the fill pipe and deflector plate height to eliminate the restriction with the riser hatch. The estimated cost is \$1,000.

DRAIN LINE:

The tank has a 6 in. drain line that worked properly during the inspection.

ANTENNAS:

There are no antennas on the tank.

ELECTRICAL:

There are two aviation lights on the roof with a photoelectric cell on the column leg ladder. The photoelectric cell was covered during the inspection and one light was functional. The lights are located at the edge of the roof, making it dangerous to access to change bulbs.

A DISCUSSION ON RESCUE/RETRIEVAL OPERATIONS FROM ELEVATED STORAGE TANKS

A series of accidents in 2003 involving falls from or in water tanks has highlighted inadequacies in tank design and a potentially greater problem. Contractors and engineers are responsible for their own employees. Even with safety training and equipment, accidents will occur. Most rescue squads are local or neighboring fire departments, some with more practice than others. The rescue may be more dangerous than the original accident, with the potential for more loss of life or injury. Elevated tanks were designed to store water, not for rescue or retrieval convenience. The following items would make retrieval safer. This discussion is offered as a starting point. We recommend that you meet with your rescue personnel and draft a rescue plan. A copy of the plan should be kept at the tank and with the rescue crew.

OSHA now requires 30 in. manholes, and roof ladders are to be replaced with platforms, steps, and railings. We recommend the changes for the convenience and safety of your rescue personnel. As far as we know, none of these conversion items to be discussed are required or mandated by any government organization for retrofits.

Previous improvements on the tank have addressed some emergency rescue concerns.

Implementation of the recommendations regarding balcony restriction, riser grate restriction, lowering through the riser, welding rungs in the transition cone, and wet interior ladder fall prevention device should enable safe retrieval procedures.

Emergency rescue personnel can access the bowl from the roof and lower a rescue basket through the new hinged riser grate and out the riser manway which is large enough for the basket.

A roof railing is recommended to enclose the roof hatch and vent. Extend the sidewall ladder to a platform, and construct steps and a railing to the roof railing. The estimated cost is \$15,000.

When the railing is built, the aviation light conduit should be extended and the lights attached to the rail to make changing bulbs safer.

PUBLIC'S EXHIBIT NO. 4

Cause No. 43191

PREFILED TESTIMONY OF EDWARD R. KAUFMAN IN SUPPORT
OF JOINT STIPULATION AND SETTLEMENT AGREEMENT

FILED ON BEHALF OF THE INDIANA

OFFICE OF UTILITY CONSUMER COUNSELOR

**TESTIMONY OF EDWARD R. KAUFMAN IN SUPPORT OF
JOINT STIPULATION AND SETTLEMENT AGREEMENT**

CAUSE NO. 43191

CITY OF ELKHART

I. INTRODUCTION

Q: Please state your name and business address

A: My name is Edward R. Kaufman and my business address is Indiana Government Center North, 100 North Senate Avenue, Room N501, Indianapolis, IN 46204-2251.

Q: By whom are you employed and in what capacity?

A: I am a Senior Utility Analyst in the Water/Wastewater Division employed by the Indiana Office of Utility Consumer Counselor (OUCC).

Q: Please describe your credentials

A: I graduated from Bentley College in Boston, Massachusetts with a Bachelors degree in Economics/Finance and an Associates degree in Accounting. Before attending graduate school, I worked as an escheatable property accountant at State Street Bank and Trust Company in Boston, Massachusetts. I was awarded a graduate fellowship to attend Purdue University where I earned a Masters of Science degree in Management with a finance concentration.

I was hired as a Utility Analyst in the Economics and Finance Division of the OUCC in October 1990. My primary areas of responsibility have been in utility finance, utility cost of capital and regulatory policy. I have worked on a range of

1 utilities including natural gas, electric, water and wastewater. I was promoted to
2 Principal Utility Analyst in August 1993, and to Assistant Chief of Economics
3 and Finance in July 1994. As part of an agency wide reorganization in July 1999,
4 my position was reclassified as the Lead Financial Analyst within the
5 Rates/Water/Sewer Division. In October, 2005 I was promoted to Assistant
6 Director of the Water/Wastewater Division. I have participated in numerous
7 conferences and seminars regarding utility regulation and financial issues. I have
8 been awarded the professional designation Certified Rate of Return Analyst
9 (CRRA). This designation is awarded based upon experience and the successful
10 completion of a written examination. I have testified before the IURC on several
11 occasions.

12 **Q: What have you done to prepare your testimony in this proceeding?**

13 A: My preparations for this cause include but were not limited to the following
14 activities: I reviewed the Petition and testimony in this cause. I conducted
15 discovery and reviewed Petitioner's responses. I attended several meetings with
16 other OUCC staff to discuss issues in this cause.

17 **II. PURPOSE OF TESTIMONY**

18 **Q: What is the purpose of your testimony in this proceeding?**

19 A: This testimony is offered to support financing issues covered by the proposed
20 settlement, which provides \$821,000 per year for the debt service element of
21 Petitioner's *pro forma* revenue requirement.

1 **III. ORIGINAL CONCERNS REGARDING PROPOSED DEBT SERVICE**

2 **Q: Please explain the concerns you had with Petitioner's proposed debt service**
3 **prior to the settlement agreement.**

4 **A:** Because Petitioner's existing debt will be paid off in the near future, I was
5 concerned that Petitioner would over-recover through rates, absent an adjustment
6 to the debt service amount included in its *pro forma* revenue requirement. Since
7 Petitioner already has a large proportion of the funds necessary to payoff its long-
8 term debt, it does not need to collect \$883,588 per year in rates. Page 28 of Mr.
9 Miller's accounting report, shows Petitioner's remaining interest and principal
10 payments on its outstanding debt is \$2,522,925. That debt will be completely
11 paid off on July 1, 2009. Petitioner's next payment of \$880,925 is due on July 1,
12 2007. It is unlikely that the IURC will issue a final order in this cause before
13 Petitioner makes its July 1, 2007 payment. Thus, by the time an order is issued in
14 this Cause, the outstanding balance on Petitioner's loan will be \$1,642,000 (or
15 \$2,522,925 minus \$880,925).

16 **Q: Why is that important?**

17 **A:** Because Petitioner's debt will be paid off in approximately 2 years, even if one
18 ignores cash on hand dedicated to repay Petitioner's outstanding debt service
19 (which should not be ignored), Petitioner's maximum annual debt service would
20 be no more than one half of \$1,642,000, or \$821,000 per year.

21 However, one should not ignore the funds on hand specifically dedicated to repay
22 Petitioner's outstanding long-term debt. The combined current balances in
23 Petitioner's bond and interest fund and its debt service reserve is approximately

1 \$1,507,579. Thus, Petitioner already has on hand the vast majority of the funds
2 needed to pay-off its existing debt.

3 **Q: But, won't Petitioner need some of those funds to make its July 1, 2007**
4 **payment?**

5 A: Certainly. The balance in Petitioner's bond and interest fund on March 31st was
6 \$1,108,628.71.¹ Petitioner's test year debt service is \$884,925 (see page 14 of
7 Mr. Miller's accounting report). Thus, Petitioner should collect and deposit
8 approximately \$73,740 per month into its bond and interest fund over the three
9 months from April to June, for a total of \$221,220, before it makes its July 1,
10 2007 payment.² Prior to making its July 1, 2007 payment, Petitioner's bond and
11 interest fund should have a balance of approximately \$1,329,850. After making
12 its July 1, 2007 payment of \$880,925 the remaining balance would be
13 approximately \$448,900. Petitioner also has \$472,500 in its debt service reserve
14 which can be used to make the final payment(s) on its outstanding debt. Thus,
15 after making its July 1, 2007 payment, Petitioner will have \$921,400 (or \$448,900
16 plus \$472,500) available to meet its remaining debt service obligations of
17 \$1,642,000 over the last two years of its outstanding debt.

18 **Q: If Petitioner's pending rate increase includes annual debt service of \$821,000,**
19 **at what point will Petitioner no longer be required to make payments to its**
20 **Bond and Interest Fund?**

¹ <http://www.elkhartindiana.org/egov/docs/1167763663618.htm> Fund Balance 602: Water Bond and Interest fund.

² In its last rate case, Petitioner was authorized to collect \$1,086,667 per year in rates for debt service. Thus, using test year figures may understate the amount available to deposit in the bond and interest fund.

1 A: According to page 12 of Petitioner's Ordinance 4759 (provided in response to
2 OUCC data request question 32) payments to the bond and interest fund and debt
3 service reserve fund cease when their combined balance equals the remaining
4 outstanding balance of Petitioner's outstanding loan. Thus, after making its July
5 1, 2007 payment, Petitioner will need to accumulate only \$720,600 to pay-off its
6 existing debt. At \$68,415 (or \$821,000 divided by 12) in 10.5 (rounded to 11)
7 months, or by June 2008, Petitioner will cease making payments to its bond and
8 interest fund.³ Afterwards Petitioner can draw on the bond and interest fund and
9 its debt service reserve to payoff its loan.

10 **IV. RESOLVING CONCERNS UNDER PROPOSED SETTLEMENT**

11 **Q: How will the above financing concerns be resolved under the proposed**
12 **Settlement?**

13 A: Under the agreed settlement, funds collected for debt service after Petitioner has
14 accumulated sufficient funds to pay off its outstanding debt will be applied to
15 Petitioner's proposed revenue requirement allowance for Extensions &
16 Replacements. As described above, starting in June 1, 2008, Petitioner will have
17 \$821,000 per year, or \$68,515 per month in debt service funds available for
18 Extensions & Replacements ("E&R").

³ This is robust and not dependent on when an order is issued in this cause, because the debt service the OUCC proposes is less than what Petitioner included in test year rates.

1 **Q: Did you consider any other alternatives to address your concerns regarding**
2 **debt service on Petitioner's outstanding debt?**

3 A: Yes. After Petitioner makes its July 1, 2007 payment, the outstanding balance
4 on its current debt (including interest) will be \$1,642,000, and Petitioner will have
5 approximately \$921,400 available to pay-off its outstanding debt. Thus, over the
6 remaining 2 years of the loan Petitioner would need to collect a total of \$720,600
7 in rates for debt service. Therefore, one alternative would be for Petitioner to be
8 permitted to recover only \$360,300 per year for debt service over the next two
9 years (from July 2, 2007 – July 1, 2009).

10 Another approach would be to make this a two-phase rate case, and remove the
11 revenues provided for debt service from Petitioner's revenue requirements at the
12 point when the amount of funds in its bond and interest fund and debt service
13 reserve exceed the remaining balance on its current debt service. However, the
14 OUCC believes the approach taken in the agreed proposed Settlement offers the
15 best solution in this case.

16 **Q: Why do you consider the approach taken in the proposed Settlement to be**
17 **the best available option in this case?**

18 A: While each option has benefits, the agreed rate increase for Petitioner under the
19 proposed Settlement reduces the funds provided for Petitioner's E&R by
20 \$821,000 per year after Petitioner has collected sufficient money to fund its debt
21 service and interest account. The OUCC's analysis does not make any reduction
22 to E&R in the first year and effectively provides Petitioner with 12 months

1 (instead of 11 months) of debt service before using the funds to reduce future
2 E&R.

3 V. CONCLUSION

4 Q: Do you support the proposed handling of financing and related funding
5 issues under the proposed Settlement?

6 A: Yes. I believe the proposed Settlement serves the public interest by keeping the
7 total amount Elkhart's customers will be required to pay for debt service through
8 rates at a level that is consistent with Elkhart's actual debt repayment obligations.
9 The proposed resolution provides all the funding Elkhart needs to meet its
10 remaining debt service obligations and resolves the OUCC's concerns about
11 providing excess recovery through rates. The proposed Settlement is reasonable
12 and fair to all interested parties.

13 Q: Do you recommend that the IURC approve the proposed Settlement?

14 A: Yes, I do.

15 Q: Does this conclude your testimony?

16 A: Yes.